

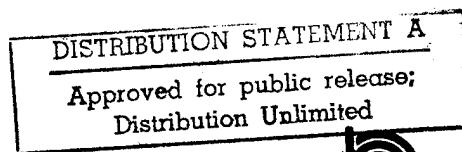
CBO PAPERS

AN ANALYSIS OF THE
ADMINISTRATION'S FUTURE
YEARS DEFENSE PROGRAM
FOR 1995 THROUGH 1999

January 1995



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NOTES

Unless otherwise indicated, all years referred to in this paper are fiscal years.

Numbers in the text and tables may not add to totals because of rounding.

Unless otherwise indicated, all costs are expressed in billions of current dollars of budget authority.

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PREFACE

For at least the past decade, mismatches have often occurred between plans for the military forces (both personnel and equipment) that Administrations proposed to field and the financial resources available to support those forces. Recent studies by the General Accounting Office and other organizations have argued that the same circumstances apply to the Administration's Future Years Defense Program covering the 1995-1999 period.

At the request of Congressmen Floyd D. Spence and Ronald V. Dellums, Chairman and Ranking Minority Member of the House Committee on National Security respectively, this Congressional Budget Office (CBO) paper analyzes the factors that could lead to a near-term mismatch between defense plans and budget resources. It also addresses the long-term budgetary implications of modernizing the Bottom-Up Review force structure. Three related CBO memorandums ("The Costs of the Administration's Plan for the Air Force Through the Year 2010," "The Costs of the Administration's Plan for the Army Through the Year 2010," and "The Costs of the Administration's Plan for the Navy Through the Year 2010") present CBO's estimates of the Administration's plan for each military department. In keeping with CBO's mandate to provide objective, nonpartisan analyses, this paper makes no recommendations.

Rachel Schmidt of CBO's National Security Division prepared the analysis under the supervision of Cindy Williams, R. William Thomas, and Neil M. Singer. The paper draws on two earlier assessments of the Administration's Future Years Defense Program by Lane V. Pierrot and Michael A. Miller.

A number of other CBO staff made important contributions. Amy Belasco conducted much of the research on the centralization of the Department of Defense's operation and maintenance activities. Amy Plapp estimated the cost of military and civilian pay raises and the savings associated with lower levels of civilian personnel. William P. Myers analyzed the data on annual growth in total costs of weapon systems for which selected acquisition reports are submitted to the Congress. Estimates of the long-term costs for the military services were prepared by Ivan Eland, Frances Lussier, and Lane Pierrot. Other components of CBO's long-term cost estimates were prepared by Ellen Breslin Davidson, Victoria Fraider, Wayne Glass, Raymond Hall, David Mosher, William Myers, Amy Plapp, and Rachel Schmidt. Kent Christensen, Wayne Glass, James Horney, Philip Joyce, David Mosher, and Lisa Siegel also provided valuable assistance. The author wishes to thank Amy Belasco, James L. Blum, Deborah Clay-Mendez, Ivan Eland, Frances Lussier, Michael Miller, William Myers, and Lane Pierrot for their helpful comments on earlier drafts. Richard L. Fernandez reviewed the paper for accuracy.

Leah Mazade edited the paper, with assistance from Christian Spoor.
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INTRODUCTION AND SUMMARY

The Future Years Defense Program (FYDP) is a classified document that shows how current and future defense spending would be allocated among the combat and support elements of U.S. military forces. As the term is used here, it reflects the Administration's planned spending priorities for the Department of Defense (DoD) for fiscal years 1995 through 1999. For at least the past decade, there has often been a mismatch between the force structure (the number of military personnel, aircraft, ships, tanks, and other equipment) that an Administration proposes to field and the financial resources available to support those forces. Several analysts argue that a similar mismatch exists in the current FYDP.

The Congressional Budget Office (CBO) has been asked on several occasions over the past year to analyze the fit between proposed levels of defense spending and the Administration's plan. In testimony before the House Armed Services Committee in March 1994, CBO stated that although the Administration's most recent plan was subject to certain risks, its blueprint for defense spending seemed roughly sufficient to support the military forces envisioned in the Bottom-Up Review through 1999—the last year of the FYDP.¹ In an April 1994 analysis, CBO outlined two clear risks to the Administration's plan: that inflation would drive up pay and other defense costs and that DoD would not be able to reduce its infrastructure as quickly as it had planned.² Since those analyses were released, the Congress has approved higher military and civilian pay raises for 1995 than those included in the Administration's budget and made plans to reduce overall levels of discretionary spending (a category that includes most of the defense budget) over the next four years. It has also become clear that the Administration will need additional resources to finance a sizable round of base closures and realignments in 1995 if it hopes to reduce costs for defense infrastructure. The combination of these factors as well as recent estimates of the magnitude of DoD's potential shortfall have reignited debate over the size of the defense budget. This paper, which is a continuation of CBO's earlier fiscal analyses, aims to provide information for those discussions.

1. Congressional Budget Office, "Planning for Defense: Affordability and Capability of the Administration's Program," CBO Memorandum (March 1994).

2. See Chapter 3 in Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 1995* (April 1994).

Which Shortfall?

In the current debate, the term "shortfall" has been used to refer to different things. For instance, the word has been used to describe estimates made by the General Accounting Office (GAO) on the extent of "overprogramming" in the Administration's FYDP if defense costs grow or if anticipated savings do not materialize.³ Alternatively, when Senate Armed Services Committee Chairman Sam Nunn introduced the 1995 defense authorization bill, he included Congressional actions in his accounting of a budget shortfall—notably, cuts in discretionary budget authority specified by the Concurrent Resolution on the Budget for fiscal year 1995.⁴

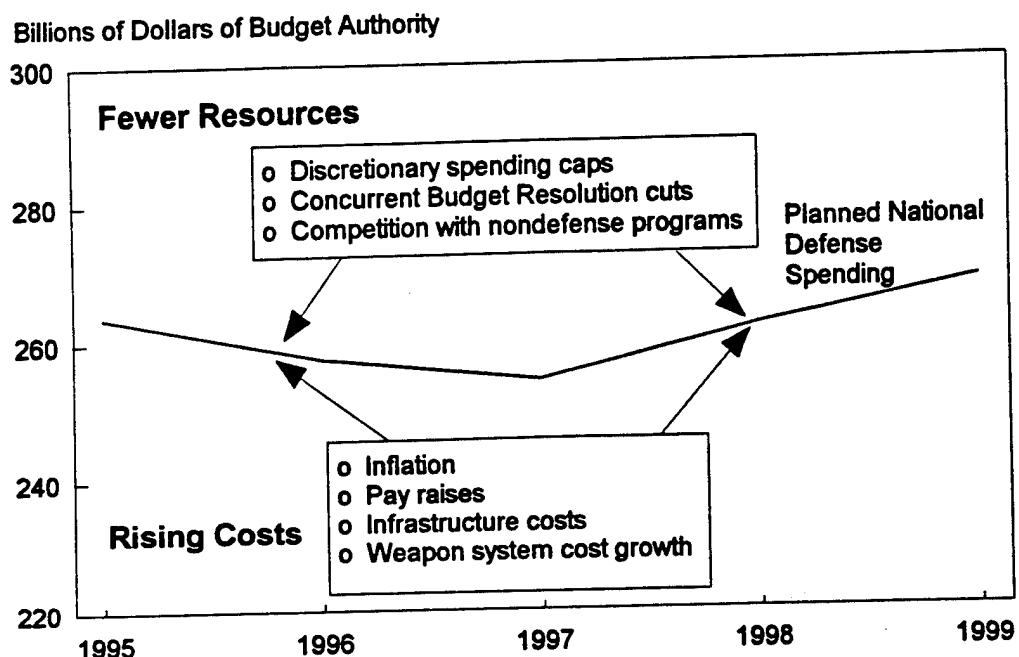
Those two usages of "shortfall" reflect two sets of pressures on national defense spending (see Figure 1). Because of concern about the size of the federal budget deficit, the Congress has instituted strict caps on discretionary spending through 1998. The combination of those caps, new cuts in discretionary spending, and competition with nondefense programs limits the real (inflation-adjusted) amount of money available for defense through the remainder of this decade. At the same time, many factors could boost defense costs above those budgeted in the FYDP—factors such as higher-than-anticipated inflation, pay raises, and growth in costs for weapon systems. In relation to GAO's estimate, shortfall refers only to the gap induced by rising defense costs. Senator Nunn includes factors that affect both the supply of and demand for resources.

Although this paper includes a discussion of current restrictions on federal spending, it focuses primarily on the demand side of the equation. In CBO's usage, a defense shortfall includes effects of some events, such as military and civilian pay raises granted by the Congress for 1995, that have already changed the costs of the plan that the Administration presented in February 1994. Other factors could raise defense costs in future years of the FYDP as well. But CBO's discussion of the shortfall concentrates on those risks that are most likely to occur.

3. General Accounting Office, "Future Years Defense Program: Optimistic Estimates Lead to Billions in Overprogramming," GAO/NSIAD-94-210 (July 1994).

4. *Congressional Record*, June 22, 1994, p. S7423.

FIGURE 1. PRESSURES ON THE ADMINISTRATION'S PLAN FOR NATIONAL DEFENSE SPENDING, 1995-1999



SOURCE: Congressional Budget Office.

Measuring a Shortfall

Many participants in the current debate depict a budget shortfall as one specific value. But some factors that could contribute to a shortfall are more likely to occur than are others. For example, the Administration's current estimate is that inflation will average 3 percent over the 1995-1999 period. It could run higher, however, and therefore FYDP shortfalls resulting from inflation could emerge. Also a possibility is that inflation might prove to be lower than projected, which would generate lower defense costs.

Studies that attempt to estimate an overall shortfall for the defense budget typically add factors whose likelihoods differ significantly. In 1995, for example, DoD will face higher costs for military and civilian pay raises than those included in the FYDP, and it is likely to face higher costs for pay raises in 1996 through 1999 as well. But judging from history, overall increases or decreases in weapons costs from year to year are highly uncertain. Adding a single allowance for average cost growth ignores the uncertainty associated with those different kinds of estimates.

For some types of defense programs, the Administration would probably change its plan if costs appeared too daunting. For example, if the costs of cleaning up defense facilities run higher than expected, DoD may defer some environmental efforts until after the FYDP period rather than keep cleanup plans in place at the expense of force structure or readiness. Likewise, some modernization programs will probably be stretched out or canceled if the costs of weapon systems rise. Thus, projected shortfalls can be lessened through administrative decisions, although strictly speaking, such actions reduce military capability relative to the Administration's original plans.

How Big a Shortfall?

CBO has concluded that the Administration's planned force structure, level of operations, and modernization programs are likely to cost about \$65 billion more than the funding provided in the FYDP, which translates into a shortfall of about 5 percent for the 1995-1999 period. That calculation takes into account only those factors that have already changed or those risks that are likely to occur—for example, inflation at rates above those originally projected (approximately equal in value to DoD's reported future adjustments of \$20 billion, which are discussed below), larger military and civilian pay raises than those included in the Administration's plan, higher costs for the 1995 round of base realignments and closures, and higher costs for weapon systems (see Table 1). If CBO includes factors that are less certain, DoD's shortfall could be more than \$100 billion from 1995 through 1999, or about 9 percent of planned funding. Note that those estimates do not include all possible areas of cost growth—for example, rising costs for health care provided to service members, their dependents, and military retirees.

CBO's \$65 billion estimate was made prior to three recent actions by the Administration that would offset part of that shortfall. First, the President announced on December 1, 1994, that he planned to seek an additional \$25 billion for defense over the 1996-2001 period. Of that amount, \$10 billion would be added during the 1996-1999 period covered in CBO's analysis. (The remaining \$15 billion would be spent in the years beyond the current FYDP.) The \$10 billion increase is sufficient to cover the cost of pay raises for military personnel under current guidelines and programs designed to improve their quality of life. Second, the Administration announced that it would seek a supplemental appropriation of more than \$2 billion for fiscal year 1995 to replace funds spent for contingency operations such as the one in Haiti. Third, on December 9, 1994, Secretary of Defense William Perry announced cuts to weapons modernization programs totaling \$7.7 billion over the 1996-2001 period. Approximately \$6 billion of that amount would affect the period

covered by CBO's analysis. Together, these three measures would reduce CBO's estimate of the shortfall to around \$47 billion, or 4 percent of total planned spending over the 1995-1999 period. Administration officials contend that their inflation projections (which are due to be released in February 1995) would lower CBO's estimate still further. The Administration may also take other actions to offset rising defense costs, such as making additional cuts in DoD's level of civilian personnel.

Mismatches between plans and resources in the defense area are not a new phenomenon. Indeed, CBO, GAO, and other organizations have long analyzed the fiscal implications of defense plans for that very reason. By some estimates, the Reagan Administration's FYDP for the 1988-1992 period was underfunded by \$325 billion—a shortfall in excess of 20 percent.⁵ In 1989, GAO projected that the cost of the Bush Administration's defense plan for the 1990-1994 period could have surpassed planned spending by \$150 billion.⁶ In a 1991 memorandum, CBO noted that the costs of maintaining and modernizing the base force, as developed by the Bush Administration,⁷ could have exceeded its spending plan by several tens of billions of dollars.⁷ In a July 1994 report, GAO argued that the current FYDP could be overprogrammed by more than \$150 billion.⁸ The magnitude of the defense mismatch is always a topic of debate; its existence at some level, however, appears to be endemic across Administrations.

Is 5 percent of planned five-year spending a large shortfall? On the one hand, \$65 billion is not large in comparison with shortfalls estimated for some past defense plans, and it may be a manageable amount. Opportunities for reducing defense costs may still exist within DoD's budget: for example, the department could continue to cancel or scale back some weapons modernization programs or consolidate some support activities. Portions of DoD's operation and maintenance (O&M) activities are not tied directly to

5. Statement by Senator Sam Nunn in August 1986 cited in David Morrison, "Downhill Slide," *National Journal* (February 21, 1987), pp. 412-417. The estimate of \$325 billion appears to have been based on a sizable drop in Administration budget requests for defense with no corresponding cuts in major weapons programs and little change in force structure. See Kevin Lewis, *National Security Spending and Budget Trends Since World War II*, N-2872-AF (Santa Monica, Calif.: RAND, June 1990), p. 61.
6. Statement of Charles A. Bowsher, Comptroller General of the United States, General Accounting Office, before the Senate Armed Services Committee, May 10, 1989.
7. Congressional Budget Office, "Fiscal Implications of the Administration's Proposed Base Force," CBO Memorandum (December 1991).
8. General Accounting Office, "Future Years Defense Program."

TABLE 1. POTENTIAL INCREASES IN DEPARTMENT OF DEFENSE COSTS, FISCAL YEARS 1995-1999 (In billions of current dollars of budget authority)

Item	1995	1996	1997	1998	1999	Total, 1995- 1999	Percentage of Total Funding
Administration's Plan	252	243	240	247	253	1,236	100
Definite Areas of Cost Growth							
Pay Raise Effective in 1995	1	1	1	1	1	6	a
Likely Areas of Cost Growth							
Pay Raise Costs, 1996-1999 ^b	0	1	3	5	7	17	1
DoD's Future Adjustments ^c	0	6	5	5	3	20	2
Estimates of Weapon System Cost Growth ^d	e	1	1	2	3	8	1
Net Costs of a Larger BRAC Round in 1995 ^f	0	1	4	2	0	7	1
Quality-of-Life Adjustments ^g	0	h	h	h	h	2	a
Contingency Operations ⁱ	1	1	1	1	1	6	a
Total, Definite and Likely Areas of Cost Growth	2	13	17	18	16	65	5

(Continued)

TABLE 1. CONTINUED

Item	1995	1996	1997	1998	1999	Total, 1995- 1999	Percentage of Total Funding
Less Certain Areas of Cost Growth							
Additional Costs of a More Pessimistic Estimate of Weapon System Cost Growth ^j	k	k	k	k	k	24	2
Environmental Cost Growth ^l	k	k	k	k	k	20	2

SOURCE: Congressional Budget Office.

NOTES: The estimate of a \$65 billion shortfall over the 1995-1999 period reflects the combined effects of factors that CBO believes are likely to occur: higher military and civilian pay raises, DoD's reported future adjustments related to changes in inflation assumptions, growth in the cost of weapon systems, additional costs for the 1995 round of base realignments and closures, DoD's planned spending for quality-of-life improvements, and the cost of contingency operations. If less certain factors are included (more pessimistic estimates of weapon systems cost growth and environmental cleanup efforts), DoD's shortfall could total more than \$100 billion. Note that these estimates do not include all possible areas of cost growth, such as higher costs for military health care, nor do they reflect all compensating adjustments that the Congress and the Administration may pursue, such as the Administration's recent announcement that it plans to increase defense spending by \$25 billion over the 1996-2001 period and request a 1995 supplemental appropriation of more than \$2 billion for contingency operations.

BRAC = Base Realignment and Closure Commission.

- a. Less than 1 percent.
- b. Estimated cost of providing military and DoD civilian pay raises over the 1996-1999 period is equal to available Administration projections of the employment cost index minus 0.5 percent plus civilian locality pay adjustments.
- c. Future adjustments that the Administration included in its 1995-1999 Future Years Defense Program. The five-year total is related to assumptions about inflation that were later projected by the Administration to be higher than those used to develop the defense plan. According to Administration officials, inflation projections due to be released in February 1995 could substantially lower this cost.
- d. Growth in procurement and in research, development, test, and evaluation (RDT&E) costs of high-risk major weapon systems, assuming that costs rise by rates consistent with those observed for similar platform types. Computed as average annual rates.
- e. Because DoD planners had relatively up-to-date information about the status of high-risk programs when they developed their budget estimates for 1995, CBO assumes that program managers will be able to handle unanticipated cost growth in that year through relatively minor changes to program plans.
- f. Estimated net increase in costs needed to hold a round of base realignments and closures beginning in 1995 that is approximately the same size as the combination of those that occurred in 1988, 1991, and 1993.
- g. Plan announced by Defense Secretary William Perry in November 1994 that the Administration intends to add \$450 million per year beginning in 1996 to increase living allowances for service members in high-cost areas, raise basic allowances for quarters, upgrade housing, and improve community and family support programs.
- h. Less than \$500 million.
- i. Incremental cost of DoD's involvement in contingency operations such as those in Somalia, Rwanda, and Haiti.
- j. Additional growth in procurement and RDT&E costs of high-risk major weapon systems, assuming that costs rise by rates consistent with those observed for similar platform types over their entire development and production cycles.
- k. Annual detail not provided.
- l. Growth in environmental costs (other than BRAC) if DoD has underestimated the costs of its programs, as it has in the past.

military readiness, and savings may be found in those areas. And given that the military foes that the United States now faces are not as formidable as was the former Soviet Union, it may be possible to accept a higher degree of risk in terms of U.S. defense capabilities. Accepting that higher risk may become more likely if the Congress decides that it would prefer to dedicate those defense resources to lowering the federal budget deficit or financing other nondefense priorities such as crime initiatives or welfare and health care reforms.

On the other hand, DoD has already experienced many years of budget cuts and may therefore have less flexibility to face further reductions. Since the mid-1980s, Administrations and the Congress have reduced spending for procurement and cut the number of military personnel as the primary means of lowering defense costs. Now that most of those cutbacks are well under way or already completed, DoD must focus on reducing other types of costs such as infrastructure—the system of bases, facilities, and civilian personnel that supports combat forces. But it takes time and money to close bases and facilities, and it may therefore be hard to realize savings quickly from cuts to infrastructure. Under current circumstances, a \$65 billion shortfall may be harder to deal with than it would have been in previous years.

If sizable defense shortfalls have existed under previous Administrations, why is the current debate so heated? Perhaps one reason is today's budget climate: concern about the size of the federal deficit has made the implications of higher defense costs more apparent than in the past and, as a result, more contentious politically. Caps on discretionary spending imposed through 1998 will require real reductions in combined appropriations for defense, international, and domestic programs. If defense costs rise and the Congress chooses to increase defense appropriations, domestic and international discretionary programs will have to be cut dollar for dollar.

Causes of the Shortfall and Recent Actions That Will Affect Its Size

When the FYDP was introduced, the Secretary of Defense stated that he might need to cut spending by \$20 billion over the 1995-1999 period to meet the Administration's defense budget limits. That value equals the higher costs that result under projections of inflation more recent than those used to create the FYDP. When the Administration proposed its budget for fiscal year 1995 in February 1994, some defense officials held out the hope that inflation would decline, which would mitigate the need for cuts. But the risk of higher inflation has not gone away—available projections of future inflation continue to exceed those underlying the FYDP. Therefore, it is likely that

some changes will be necessary. The exact magnitude of the shortfall may vary, depending on whose inflation projections one uses.

Costs of pay raises for military and civilian personnel are also higher than presumed in the FYDP. When the Administration developed the 1995-1999 plan, it assumed that it could hold pay raises below what they would be under current guidelines. But the Congress has granted military and civilian personnel pay raises for 1995 that are, on average, 1 percentage point higher than what was included in the FYDP, and DoD officials have stated that they plan to propose military pay raises that follow current guidelines through the remainder of the decade. CBO estimates that pay raises granted for 1995 combined with higher raises from 1996 through 1999 would cost about \$23 billion more than is estimated in the FYDP. Pay raises granted for military and civilian personnel for 1995 account for about \$6 billion of that total. Under available Administration projections of the employment cost index (ECI) and guidelines set by current law, future raises for military personnel would add \$6 billion to costs, and those for civilian personnel would total more than \$11 billion (\$8 billion from adjustments designed to narrow the gap between federal and local pay scales). Given, however, that over the past two years, the President and the Congress have not granted pay raises as large as those allowed under federal guidelines, the \$23 billion estimate may overstate the cost of pay raises somewhat. Similarly, Administration projections of the ECI for 1996 are likely to be revised downward, which would also lower CBO's estimate.

Another cost risk relates to the scope and pace of cuts to defense infrastructure. Funding for the bases and support activities that make up that infrastructure is found primarily in O&M appropriations, which also finance many activities related to military readiness. Some analysts believe that if DoD is unable to reduce infrastructure costs as quickly as planned, funding for military readiness may suffer.

Historically, roughly half of DoD's operating costs have varied with force levels; the rest have remained relatively fixed—much like business overhead costs that do not change quickly in response to sales volume.⁹ The Administration's FYDP plans a total of \$26 billion in O&M cuts over the 1995-1999 period relative to the 1994 level. If past relationships hold true today, roughly half of those cuts can be attributed to force reductions under the Bottom-Up Review, and the remainder may be ascribed to expected savings from cuts to infrastructure, among other factors. If those savings do

9. CBO, *An Analysis of the President's Budgetary Proposals*, pp. 33-34, and "Planning for Defense," pp. 14-16.

not materialize as quickly as the Administration has planned, its FYDP could face upward pressure on costs.

DoD could achieve infrastructure savings by conducting a large round of base closures beginning in 1995 under the framework of the Base Realignment and Closure (BRAC) Commission. But closing facilities and separating employees from the defense workforce also costs money in the near term, and the Administration included relatively little funding in its FYDP for the 1995 round of base realignments and closures. Policy statements by defense officials suggest that the goal of that round is to reduce DoD's total plant replacement value by 15 percent—roughly equivalent to reductions from the 1988, 1991, and 1993 rounds combined. The FYDP, however, includes less than \$3 billion for the up-front costs of the next BRAC round during the 1995-1999 period. By comparison, if funding for the first three rounds had been phased to coincide with the 1995 round, DoD would have budgeted about \$7 billion more for their combined costs than is included in the FYDP, net of expected savings.

Some Members of Congress have expressed interest in delaying the 1995 BRAC round or reducing it in scope, but in general the Congress appears to support pursuing a sizable round in 1995. In April 1994, Congressman James Hansen introduced an amendment to the defense authorization bill that would have delayed the 1995 round for two years. Senator Dianne Feinstein introduced a parallel bill in May 1994. But Congressman Hansen's amendment was defeated overwhelmingly, and Senator Feinstein's bill never reached the Senate floor.

The costs of developing and producing some weapons will undoubtedly rise during the remainder of the decade, but precisely what effect that increase will have on procurement and on research, development, test, and evaluation (RDT&E) budgets is hard to predict. Numerous studies have shown that the costs of major weapon systems are routinely underestimated. Even after one adjusts for inflation and changes in the number of units purchased, it is not unusual for a weapon system to experience costs that are 30 percent to 50 percent more than those estimated at the program's start—and sometimes the increase is higher. But pinpointing the amount of pressure DoD might experience over the 1995-1999 period is difficult, because the rate of cost growth varies depending on the mix of new and mature systems being procured.

Systems that are most likely to experience cost growth are those that are under development or in the early stages of production. Although the Administration's plan has few new programs compared with previous FYDPs,

it does contain funding for several systems at risk of cost growth, such as the Air Force's F-22 fighter, the Navy's new attack submarine, and the Comanche helicopter. Using planned levels of procurement and RDT&E spending and historical rates of cost growth calculated for various types of weapon systems, CBO estimates that the cost of high-risk weapons could grow by \$8 billion to \$31 billion during the FYDP.¹⁰

Note, however, that this estimate does not reflect budgetary reactions to growth in the cost of weapon systems—specifically, changes that the Congress and the Administration might make to offset higher costs such as program stretch-outs or cancellations. Strictly speaking, such changes reduce military capability relative to planned levels. But stretch-outs and cancellations are routinely carried out in response to budget pressures because they reduce total defense costs, at least in the near term. For that reason, DoD may not require tens of billions of dollars more to modernize equipment during the 1995-1999 period if the Congress agrees to programmatic changes; in fact, such changes could arguably offset a sizable portion of any overall shortfall in the defense plan. DoD would, however, pay higher procurement costs per unit for its new weapon systems.

Other actions by the Congress will also affect the size of the shortfall. The Congress has tightened targets for discretionary spending under the 1995 Concurrent Resolution on the Budget, which could constrain total (defense and nondefense) discretionary budget authority by \$26 billion between 1995 and 1998. Likewise, the 1994 crime bill could further restrict resources available for defense. And defense authorizations and appropriations for 1995 postponed purchases of some weapon systems that the Administration had requested (such as the Tri-Service Standoff Attack Missile) and increased funding to speed up procurement of others (such as the Navy's seventh LHD-1 amphibious assault ship).

The Administration may continue to take steps that offset part of the shortfall (see Table 2). For example, defense officials may raise targets for reductions of civilian personnel. To illustrate the effects of such a policy, if the Administration reduced DoD's civilian workforce by an additional 40,000 workers between 1995 and 1999, it could lower defense costs by about \$5 billion. In August 1994, Deputy Secretary of Defense John Deutch asked the military services to consider slowing or canceling nine major weapon systems, including high-priority programs such as the DDG-51 destroyer, the Comanche helicopter, the V-22 Osprey, and the F-22 fighter. Defense

10. Historical rates of cost growth are taken from Karen Tyson and others, *The Effects of Management Initiatives on the Costs and Schedules of Defense Acquisition Programs*, vol. 1, Main Report, P-2722 (Alexandria, Va.: Institute for Defense Analyses, November 1992).

Secretary William Perry recently announced changes to seven of those programs (primarily stretching them out) that the Administration expects will save \$7.7 billion over the 1996-2001 period. Additional cuts could lower defense costs further. If all nine programs were canceled and no new spending put in their place for purchasing alternative systems, FYDP costs would decline by \$47 billion.

TABLE 2. POSSIBLE COMPENSATING ADJUSTMENTS IN DEPARTMENT OF DEFENSE COSTS, FISCAL YEARS 1995-1999 (In billions of current dollars of budget authority)

Adjustment	1995	1996	1997	1998	1999	Total, 1995-1999	Percentage of Total Funding
Additional Cuts in Civilian Personnel Levels ^a	-1	-1	-1	-1	-2	-5	b
Illustrative Cancellations of Major Weapons Programs							
Comanche helicopter	-1	c	c	-1	-1	-3	b
DDG-51 destroyer	-3	-3	-3	-3	-3	-15	1
V-22 Osprey aircraft	c	-1	-1	-1	-1	-5	b
F-22 fighter aircraft	<u>-2</u>	<u>-2</u>	<u>-3</u>	<u>-2</u>	<u>-3</u>	<u>-13</u>	1
Total	-7	-7	-8	-8	-10	-41	3

SOURCE: Congressional Budget Office.

a. Illustrative savings from cutting DoD's civilian personnel by an additional 40,000 people between 1995 and 1999.

b. Less than 1 percent.

c. Less than \$500 million.

Costs for Bottom-Up Review Forces Beyond 1999

Over the longer term, CBO projects that the cost of the Bottom-Up Review force structure will rise. The cost of national defense programs will increase largely as a result of aging fleets and the need to replace weapon systems. CBO estimates that the cost of Bottom-Up Review forces to future Administrations will, on average, be \$7 billion to \$31 billion (in 1995 dollars) higher per year from 2000 to 2010 than the level of spending proposed by the Administration for 1999, or about 3 percent to 13 percent higher. That range reflects different analytical assumptions: the lower value assumes that DoD will be able to constrain the cost of producing its weapon systems, whereas the higher value assumes that weapons costs will rise at rates consistent with historical experience.

Although the higher end of the range includes an estimate of larger *costs* for weapon systems, their effects on procurement and RDT&E *budgets* cannot be predicted. The Congress and the Administration may change U.S. force structure or modernization plans, which would, in turn, affect long-term cost projections. If the Bottom-Up Review force structure remains in place through the next decade, however, CBO's estimates show that there will be strong upward pressure on defense costs as DoD begins to replace and refurbish weapon systems.

Unless policies are enacted that cut government spending or raise revenues, CBO also projects that the federal deficit will begin to increase in 1996 and rise steadily through 2004--the last year for which CBO has made a projection. The combination of higher defense costs and an increasing federal deficit could result in even larger budget deficits or substantial pressure to cut nondefense spending or defense force structure in the next decade.

These findings have important implications for today's policy options. Measures that postpone purchases of major weapon systems until 1999 lower defense costs during the FYDP but may create the need for even higher levels of spending over the next decade. Unless the budget environment permits higher defense spending after the year 2000, options that defer spending today could lead to more intense budgetary pressures tomorrow.

Illustrative Options for Addressing the Shortfall

The Administration and the Congress will need to choose from among a number of difficult policy options to address the defense shortfall over the

next five years. This analysis describes four general types of solutions: increase defense's share of discretionary spending, constrain DoD's responsibilities, lower DoD's costs of doing business, or reduce military capability.

Increase Defense Spending. Some critics contend that the current FYDP would cut too much from defense spending. The Administration's planning objective is to be able to fight and win two major regional contingencies that occur nearly simultaneously. Under the Bottom-Up Review, U.S. forces would fall to 10 active Army divisions, 330 battle force ships, and 13 active Air Force tactical fighter wings, as compared with 18 divisions, 546 ships, and 24 wings in 1990, the last year of the Cold War. (The number of active Marine Corps divisions remains at 3.) The Administration plans to enhance U.S. forces through investments in precision-guided munitions and airlift and sealift capabilities, but there is still considerable debate as to whether the Bottom-Up Review force structure could actually accomplish its aims. Some analysts believe that even under that force structure, planned levels of defense spending are not enough to ensure high levels of military readiness or to protect the quality of life of military personnel.

The Congress may, therefore, choose to devote more resources to national defense programs. Higher levels of spending might be used to offset likely areas of defense cost growth, such as larger pay raises. But higher levels of defense spending do not guarantee improved military readiness or force structures. Funds might, for example, help to keep bases and facilities open that might otherwise be considered excess capacity. And under discretionary spending caps set through 1998, the Congress would need to offset any increases in defense spending with comparably sized cuts in nondefense programs. That balancing could prove difficult if there was considerable support for addressing domestic issues such as crime, education, welfare reform, and health care reform.

Limit DoD's Responsibilities. Some critics argue that the Administration's plan contains too many programs that are not directly related to U.S. combat capability. Spending for environmental cleanup, drug interdiction, support for converting or sustaining the defense industrial base, and peacekeeping operations appears to have grown in recent years, and some critics argue that those resources might be better used in funding activities that enhanced readiness for military combat. But supporters contend that those tasks are within the purview of defense responsibilities, and therefore it is appropriate to fund them within DoD's budget.

Defining DoD's responsibilities more narrowly to exclude those types of activities might result in less pressure on defense costs. But if the Congress chose simply to transfer many of the same responsibilities to nondefense programs, other federal costs would rise. If, for example, the Environmental Protection Agency was given responsibility for cleaning up defense bases, one would expect its costs to grow. In some cases, DoD may be better able than other federal agencies to accomplish the aims of those programs.

Under a broad interpretation, "nontraditional" spending accounts for about \$11 billion to \$13 billion in annual defense spending.¹¹ Cuts to those programs deserve consideration, but unless the Congress is willing to cut most or all of them, the reductions would not address the likely magnitude of DoD's shortfall.

Reduce DoD's Costs of Doing Business. One way for the Administration to avoid having a "hollow" force—that is, one marked by shortages of experienced personnel, training, or equipment—is to lower the cost of equipping, operating, training, and maintaining military forces. Under the Administration's National Performance Review and recent legislative changes to the federal procurement process, the costs of buying weapons and equipment could fall. But DoD's track record for implementing initiatives that improve acquisition efficiency is not good, and even reforms that are carried out successfully may not save large amounts of money in the near term.

Another way to reduce DoD's costs is to cut the number of bases, facilities, and civilian personnel that operate and support military forces. Recent analyses suggest that considerable excess capacity exists, for example, among publicly owned depots that maintain military equipment. If funding permits, some of that overcapacity will be reduced through the next BRAC round, scheduled to begin in 1995. But the Congress and the Administration may be able to achieve greater efficiencies by consolidating and in some cases centralizing management of support activities.

Reduce Military Capabilities. Although unpopular, those policy alternatives that are most certain to reduce defense costs involve lessening military capabilities.

Reconfiguring service roles and missions to avoid duplication of effort among the military services could cut costs considerably. But in the process, such a policy would reduce military capabilities. The Administration might,

11. These figures are based on data from the Congressional Research Service, which makes no judgment as to whether those programs contribute to military capability.

for example, rely more on Air Force bombers to conduct air strikes on distant targets rather than maintain the current size of the Navy's aircraft carrier fleet. The issue of how to assign military responsibilities is highly contentious because each service vigorously defends its current missions and the resources budgeted to carry them out. The Administration would also face considerable political constraints since closing associated bases and canceling programs would hurt certain constituencies.

Another option is to spend less to maintain readiness. Given current reports that three of the Army's 12 divisions are not well prepared for conflict, reducing funding for military readiness is likely to be an unpopular option. But measuring readiness is an inexact science, and today's indicators send ambiguous signals. In June 1994, for example, a Defense Science Board task force concluded that today's general state of readiness is acceptable for most areas, although there are "pockets of unreadiness."¹² Likewise, a recent CBO paper found that, based on publicly available data, unit readiness appears high relative to historical levels.¹³ At the same time, some objective measures of readiness could indicate near-term problems, such as falling C-ratings for selected units (which are based on a commander's evaluation of the status of personnel, training, quantity of equipment and supplies, and equipment condition for his or her unit), lower funding for Navy depot maintenance, and reduced funding for real-property maintenance throughout DoD.

Funding for one budget category that is closely linked with readiness—O&M spending—is high for 1995, and although it would decline somewhat during the remaining years of the FYDP, spending per active-duty service member would remain high relative to historical standards. But by itself, O&M spending does not tell the whole story. Significant portions of those expenditures are not tied directly to preparing for military combat (one example is health care provided for retirees and military dependents), and therefore it is difficult to isolate trends in funding for activities that enhance readiness. It may be the case, for example, that DoD could cut O&M funding for some activities without appreciably affecting readiness. Ultimately, however, if DoD is unable to support and maintain its forces with less money, a decline in military readiness could arguably result.

Given constraints on the defense budget, the Congress and the Administration may need to consider reductions to U.S. force structure. Over

12. Office of the Under Secretary of Defense for Acquisition and Technology, "Report of the Defense Science Board Task Force on Readiness" (June 1994).

13. Congressional Budget Office, "Trends in Selected Indicators of Military Readiness, 1980 Through 1993," CBO Paper (March 1994).

the past several years, U.S. forces have become involved in numerous contingency missions, which has raised operating tempos for certain types of units such as Navy surface combatants, Marine expeditionary units, and Air Force airlift crews. Further reductions to numbers of forces could drive those "optempos" even higher, and for that reason, Administration officials have stated that they do not want to reduce forces below Bottom-Up Review levels. But not all units have been used with equal frequency, so there may be some room for further reductions.

The question of whether more force reductions are possible raises a related issue: whether DoD's planning objectives are appropriate ones for the United States. Supporters of the Administration's military strategy contend that the United States must be prepared to fight two rather than one major regional conflict; otherwise, an unfriendly nation could take advantage of U.S. involvement in one war to achieve its aims. But the Congress may want to consider whether the United States is willing to assume more risk for lower levels of defense spending. That risk may be acceptable if, for example, one believes that the United States is more likely to get involved in major regional conflicts sequentially rather than simultaneously or if one believes that likely opponents have forces less capable than those included as part of the Administration's assumptions during its Bottom-Up Review.

A final approach—one that the Administration is pursuing—involves canceling or delaying some weapons modernization programs. Defense Secretary Perry stated recently that in its 1996 budget, the Administration has chosen to place higher priority on improving the readiness of U.S. forces and the quality of life for military personnel than on modernizing weapons. For that reason, the Administration is canceling or postponing even some weapons programs that the military services consider to be among their top priorities. Additional cuts to those programs are possible. But some Members of Congress see that approach as one that substitutes future capability or readiness for readiness today and that could endanger military industrial capabilities in certain sectors.

Combining Policy Options

Just as those factors that could affect costs within the FYDP may or may not occur, each of the policy options described above has a different likelihood of reducing defense costs. Some alternatives (such as limiting the amount of money spent on, say, defense conversion programs) could reduce the costs of the Administration's plan but probably will not by themselves solve the whole shortfall problem. Options that aim to improve the efficiency with which

DoD conducts its business—such as acquisition reform—could save more money, but their prospects for success are less certain. Raising defense spending could be a solution to the situation, but constraints on discretionary spending will remain tight at least through the remainder of this decade, and the Congress would need to agree to corresponding cuts in nondefense spending. Policy options that reduce defense capabilities—such as cutting force structure or canceling weapon systems—address the shortfall with the most certainty of success.

The Administration appears to be pursuing a combination of these approaches. Secretary Perry has launched initiatives designed to reduce the costs of defense procurement, but it remains to be seen how successful those changes will be. In response to Congressional direction, a commission is reviewing the assignment of roles and missions among the services and is scheduled to release its recommendations this spring. Although it is unclear how many facilities will be included, a new round of recommendations for base realignments and closures will begin in 1995. Yet the likelihood that those measures will reduce defense costs by the size of the shortfall is uncertain. Therefore, the Congress and the Administration may also need to consider other policy options, such as consolidating support activities and reducing military capabilities.

THE ADMINISTRATION'S PLAN FOR 1995 THROUGH 1999

Between 1990—the last year of the Cold War—and 1995, real spending by the Department of Defense fell by 25 percent, or some \$85 billion in 1995 dollars. As it was introduced in February 1994, the Administration's FYDP would cut real annual DoD spending by an additional 10 percent between 1995 and 1999, or about \$25 billion (see Table 3). If the Administration's plan is enacted, it would decrease the share of U.S. gross domestic product (GDP) devoted to national security to 2.9 percent—its lowest share since before World War II.

With the demise of the Soviet Union, the United States may now be able to protect its national security interests with these lower levels of defense spending. But analysts disagree on how much is enough: some believe that current threats to U.S. security warrant more resources, whereas others have called for even greater cuts, noting that the United States will still be spending almost as much annually on defense as the rest of the world

TABLE 3. THE ADMINISTRATION'S PLAN FOR DEPARTMENT OF DEFENSE SPENDING, BY TITLE, FISCAL YEARS 1995-1999 (In billions of 1995 dollars of budget authority)

Title	1990	Administration's Plan					Real Percentage Change	
		1995	1996	1997	1998	1999	1990-1995	1995-1999
Operation and Support								
Military personnel	91	70	65	63	62	61	-22	-13
Operation and maintenance	<u>101</u>	<u>93</u>	<u>86</u>	<u>83</u>	<u>81</u>	<u>81</u>	-8	-13
Subtotal	192	163	151	146	143	142	-15	-13
Investment								
Procurement	94	44	48	48	53	53	-53	22
Research, development, test, and evaluation	42	36	34	30	28	27	-14	-26
Military construction	<u>6</u>	<u>5</u>	<u>8</u>	<u>5</u>	<u>4</u>	<u>4</u>	-15	-27
Subtotal	142	85	89	84	85	84	-40	-1
Family Housing	4	3	4	3	3	3	-9	4
Other Adjustments	<u>-1</u>	<u>a</u>	<u>-6</u>	<u>-5</u>	<u>-4</u>	<u>-3</u>	n.a.	n.a.
Total	337	252	237	228	227	227	-25	-10

SOURCE: Congressional Budget Office based on data from the Department of Defense.

NOTES: The values for 1990 were adjusted for the incremental costs of Operation Desert Shield. For the purposes of this table, values for the National Defense Sealift Fund over the 1995-1999 period were included in procurement spending and excluded from other adjustments.

n.a. = not applicable.

a. Less than \$500 million.

combined.¹⁴ But if the Congress and the Administration hope to maintain capable, ready forces with lower levels of funding, they will need to make difficult decisions about the types of military commitments that the United States should make and the way in which those lower levels of resources should be spent.

14. "Is the U.S. Defense Budget Being Cut Too Much?" *The International Economy* (March/April 1994).

Avoiding a Hollow Force Structure

Administration officials have noted that they want to avoid a "hollow" force—the term coined by General Edward C. Meyer, former Army Chief of Staff, that has been used to refer to shortages of experienced personnel, training, and equipment in the mid- and late-1970s. Although anecdotal in nature, persuasive evidence indicates that many units were not well prepared for combat during that period.¹⁵ That situation arose in part because the Congress and the Administration chose to emphasize modernizing weapons at a time when resources devoted to defense were either too few or too inefficiently used to maintain a large and ready force structure and invest in new equipment.

Today, the Congress and the Administration face equally important decisions about defense priorities. Between 1990 and 1995, the Bush and Clinton Administrations and the Congress have cut operating funds less than the numbers of forces those funds support, an action that should help to avoid a hollow force. But by the end of 1995, most of the cuts in forces associated with the Bush Administration's base force plan and the Clinton Administration's Bottom-Up Review will be nearly completed. Meanwhile, closures of bases and facilities—which are supported by operating funds—have not kept pace with reductions in forces, and excess capacity remains among some types of facilities.

If the Congress chooses to devote fewer resources to DoD through the end of the decade, defense planners will need to make difficult choices about how to reduce funding. Should they cut forces further, give less priority to weapons modernization programs, or cut operating costs by reducing DoD's infrastructure? In 1989, William Perry, now Secretary of Defense, wrote that "a premium should be placed on readiness, both near-term, by maintaining the O&M account, and medium-term, by maintaining an efficient modernization program to replace aging equipment that is difficult to operate and maintain."¹⁶ The Administration proposed such a strategy for 1995; it actually increased O&M and kept total investment spending relatively level. But through 1999, the FYDP calls for O&M cuts in order to continue lowering the defense budget while still modernizing some weapons and equipment.

15. CBO, "Trends in Selected Indicators of Military Readiness."

16. William J. Perry, "Defense Investment Strategy," *Foreign Affairs* (Spring 1989), pp. 72-92.

Operating Funds Have Been Cut Less Than Force Structure. Based on several measures, the size of U.S. forces is scheduled to decline by about 30 percent to 45 percent between 1990 and 1999 (see Table 4). Although the Administration has programmed continued reductions in the number of forces fielded through the end of the decade, the majority of the drawdown in military personnel, tactical fighter wings, and ships will already be in place by the end of 1995. The total number of active-duty service members, for example, would fall by only an additional 5 percent under the Administration's plan after experiencing a 26 percent cut between 1990 and 1995.

By comparison, between 1990 and 1995, operation and support (O&S) funding has been cut less than the numbers of forces. The O&S category consists of pay and benefits for service personnel (under the military personnel title of DoD's budget) and funds for operations such as training military units, maintaining their equipment, running base facilities, providing health care for service members and their dependents, and numerous other activities (under the O&M title). Between 1990 and 1995, both categories of O&S spending have been cut less than the forces they support: O&M funding has declined by just 8 percent, and funding for military personnel has fallen by 22 percent from 1990 levels. But as DoD reaches the limit of savings associated with reductions in forces, it becomes more difficult to avoid deeper cuts in O&S.

O&M Spending Is Protected in 1995. For 1995, the Administration proposed supporting near-term readiness over modernization. Thus, O&M spending rose in real terms by 4 percent over the 1994 level at the same time that the number of active-duty service members declined by 5 percent. But although that title finances important activities such as training units and maintaining equipment, O&M spending is not synonymous with readiness. Other activities that do not contribute directly to the ability to prosecute wars are funded under O&M as well, such as the operating costs of military bases and commissaries, health care for military dependents and retirees, and environmental cleanup efforts.

The Status of Military Readiness Today

The evidence about current readiness is ambiguous. In a June 1994 study, a Defense Science Board task force concluded that although there are "pockets of unreadiness," today's general readiness level is "acceptable in most

TABLE 4. OPERATION AND SUPPORT FUNDING AND FORCES IN THE ADMINISTRATION'S PLAN FOR DEPARTMENT OF DEFENSE SPENDING (By fiscal year)

	1990	1995	1999	Real Percentage Change		
				1990-1995	1995-1999	1990-1999
Operation and Support Funding (In billions of 1995 dollars of budget authority)						
Military Personnel	91	70	61	-22	-13	-33
Operation and Maintenance	101	93	81	-8	-13	-20
Total	192	163	142	-15	-13	-26
Forces						
Active-Duty End Strength (Thousands) ^a	2,069	1,526	1,453	-26	-5	-30
Active Army Divisions	18	12	10	-33	-17	-44
Battle Force Ships	546	373	330	-32	-12	-40
Active Naval Wings	13	10	10	-23	0	-23
Active Air Force Tactical Fighter Wings	24	13	13	-46	0	-46

SOURCE: Congressional Budget Office based on data from the Department of Defense.

NOTE: The funding values for 1990 were adjusted for the incremental costs of Operation Desert Shield.

a. Excludes full-time National Guard and Reserve forces.

measurable areas.¹⁷ Likewise, a recent CBO paper found that based on publicly available data, unit readiness appears to be high relative to historical levels.¹⁸ Both analyses note that DoD's current measures of readiness and

17. Office of the Under Secretary of Defense for Acquisition and Technology, "Report of the Defense Science Board Task Force."

18. CBO, "Trends in Selected Indicators of Military Readiness."

indicators of future readiness are imperfect. Nonetheless, those analyses suggest that U.S. forces are not on the "razor's edge" of becoming unready.

In recent months, however, several Members of Congress have charged that U.S. military forces are not well prepared for combat, in part because contingency operations are being funded at the expense of training and other activities that enhance readiness.¹⁹ Secretary Perry noted recently that three of the Army's 12 divisions were rated as C-3—the next-to-lowest readiness ranking for operational units—at the end of 1994, indicating that they needed additional resources or training. He attributed the problem to cash flow shortages triggered by a quick succession of U.S. operations in Rwanda, Cuba, Haiti, and Kuwait toward the end of the fiscal year.

Typically, DoD requests supplemental appropriations for the incremental costs of contingency operations, and the Congress passed two such appropriations for 1994. But the second increment of funding was not available until the start of fiscal year 1995, and that fact, combined with high demand for U.S. forces at the end of 1994, meant that fewer funds were available for training selected units in traditional combat methods and for maintaining their equipment. The Administration claims that the problem is primarily a matter of timing—several months may pass between the time forces are deployed and when resources become available. But critics argue that the United States should not be involved in contingency operations unless U.S. national interests are clearly at stake. Following that line of reasoning, the Administration would spend fewer defense resources on contingency operations if it chose to become involved in those missions more selectively.

Under a system of flexible (or tiered) readiness, units that are scheduled to be deployed first in the event of conflict receive higher priority for operating funds than units that would be deployed later. (For example, according to Secretary Perry, the three Army divisions that received C-3 ratings are heavy reinforcements rather than contingency forces.) Overall, Administration officials still maintain that U.S. forces are ready to carry out the nation's national security tasks. But perhaps what is needed is a public debate about whether the Congress is willing to accept lower levels of readiness for certain units and thus a higher degree of risk. In other words, how much readiness is enough?

19. See, for example, Senator John McCain, "Going Hollow: The Warnings of the Chiefs of Staff" (September 1994). See also the statements of Congressman Floyd Spence, Ranking Republican, House Armed Services Committee, in press releases on November 15 and 16, 1994.

Under the Administration's plan, constant-dollar O&M funding would decline after 1995. But the amounts proposed in the FYDP would still keep O&M spending per active-duty service member at relatively high levels.

The O&M title finances many of the goods and services that contribute to current and future readiness, but the exact nature of the relationship between the two is unclear. Several studies have shown that real O&M spending per active-duty service member has been rising over time. Some analysts contend that DoD should assume that it will continue to do so because as weapon systems age or become more technologically complex, they are more expensive to operate and maintain.²⁰ But some new weapon systems are designed to be more reliable than previous generations of equipment and may be less costly to operate.

Another reason for the difficulty in drawing conclusions about military readiness from trends in O&M spending is that DoD's infrastructure is changing. If DoD is slow to consolidate excess infrastructure and to close facilities, keeping bases open could occur at the expense of other activities that enhance readiness more directly. But if instead DoD is able to reduce its civilian payroll and recoup savings from closing defense facilities and consolidating support activities, it may be able to support its forces in a more cost-effective manner. Therefore, planned funding levels may be sufficient.

A Modest Trend Toward Centralized Funding for Support Activities Is Apparent. One trend in O&M spending is less evident from aggregate data: a modest movement toward financing some types of support activities through defensewide accounts rather than by direct appropriations to the military services.

O&M spending for all of the services combined and for defensewide and defense agency accounts can be usefully looked at in two ways: as appropriated (without adjustments) and adjusted for some of the changes in appropriation categories that have occurred since 1990 (see Table 5). Those changes include the creation of the Special Operations Command, the Defense Health Program, and the Defense Environmental Restoration Account. For each of those programs, appropriations are now made to a centralized defensewide account, although some funds are later allocated to each military service. Appropriations for a number of other, smaller programs have also been transferred between defensewide and service accounts, but

20. See, for example, Dov Zakheim and Jeffrey Ranney, "Matching Defense Strategies to Resources," *International Security*, vol. 18, no. 1 (Summer 1993), pp. 51-78. See also Steven Daggett, "Defense Spending: Does the Size of the Budget Fit the Size of the Force?" CRS Report 94-199F (Congressional Research Service, February 28, 1994).

they are not reflected in Table 5. Nor do the adjustments reflect the numerous changes that have been made among appropriation titles since 1990—in the case of depot-level repairables, for example, shifting funds for the purchase of some spare parts out of procurement spending and into O&M. Nonetheless, the data in Table 5 show generally that much of the apparent growth observed in defensewide and defense agency O&M budgets results from definitional changes rather than programmatic growth.

The changes discussed above do not necessarily mean, however, that the management of support activities has become more centralized. For example, the Defense Health Program (which finances part of the health care expenditures for military service members, their dependents, and retirees) accounts for the majority of those funding shifts. But the Office of the Assistant Secretary of Defense for Health Affairs (which runs the Defense Health Program) does not manage military medical personnel or make decisions about staffing levels; those activities remain within the purview of the individual services. Environmental cleanup efforts are another category in which initial appropriations go into the Defense Environmental Restoration Account, but management decisions about cleaning up contaminated sites are left largely to the military services.

A few support functions have turned to centralized management—for example, commissaries, distribution of consumable supplies, financial and accounting services, and printing services. Most appropriations to pay for those functions come from each service's O&M account and are used in turn to pay a revolving fund, the Defense Business Operating Fund. DoD may be able to lower its costs by consolidating other activities as well.

With the exception of consolidated management of supply depots under the Defense Logistics Agency, most activities that have turned to centralized management thus far do not provide services that are thought to affect readiness directly. The military services have been reluctant to centralize activities that are tied to readiness (such as training pilots and maintaining equipment) because by keeping those functions in-house, they believe they provide more responsive service to their own forces. But that rationale may not always hold true; in the case of supply depots, for example, readiness indicators suggest that a centralized wholesale system can fill requisitions from stocks on hand about 85 percent of the time—the goal rate.²¹

21. CBO, "Trends in Selected Indicators of Military Readiness," p. 49.

The Administration's Plan Assumes Faster Civilian Personnel Cuts. Because civilian pay and benefits make up nearly 40 percent of total O&M spending, one key to reducing support costs is to cut the number of DoD's civilian employees. Between 1990 and 1995, the number of civilian personnel fell by 19 percent—a smaller share than the 26 percent decline in active-duty military personnel that occurred over the same period. Under the Administration's plan, civilian cuts would start to catch up with those of the military, ultimately reaching 26 percent over the 1990-1999 period compared with 30 percent for active-duty military personnel (see Table 6).

TABLE 5. PROPOSED OPERATION AND MAINTENANCE SPENDING, WITH AND WITHOUT ADJUSTING FOR CHANGES IN APPROPRIATION CATEGORIES (By fiscal year)

	Budget Authority (Billions of 1995 dollars)			Real Percentage Change		
	1990	1995	1999	1990-1995	1995-1999	1990-1999
Unadjusted (As appropriated)						
Military Services	92	69	57	-25	-17	-37
Defensewide and Defense Agency	10	24	24	142	-2	138
Total	101	93	81	-8	-13	-20
Adjusted for Changes Since 1990 in Appropriation Categories						
Military Services	82	69	57	-15	-17	-30
Defensewide and Defense Agency	20	24	24	21	-2	19
Total	101	93	81	-8	-13	-20

SOURCE: Congressional Budget Office based on data from the Department of Defense.

NOTE: Adjusted values in 1990 reflect the transfer of appropriations for the Special Operations Command, the Defense Health Program, and the Defense Environmental Restoration Account from the military services to defensewide accounts. The values for 1990 were adjusted for the incremental costs of Operation Desert Shield.

TABLE 6. CHANGES IN MILITARY AND CIVILIAN PERSONNEL
END STRENGTHS, WITH AND WITHOUT ADJUSTING
FOR TRANSFERS (By fiscal year)

	Thousands of Personnel			Percentage Change		
	1990	1995	1999	1990- 1995	1995- 1999	1990- 1999
Active-Duty Military Personnel^a						
Army	751	510	495	-32	-3	-34
Navy	583	442	394	-24	-11	-32
Marine Corps	197	174	174	-12	0	-12
Air Force	<u>539</u>	<u>400</u>	<u>390</u>	-26	-2	-28
Total ^a	2,069	1,526	1,453	-26	-5	-30
Civilian Personnel						
Unadjusted						
Military services	970	721	665	-26	-8	-31
Defense agency and other personnel	<u>103</u>	<u>152</u>	<u>130</u>	48	-14	26
Total	1,073	873	795	-19	-9	-26
Adjusted for transfers ^b						
Military services	930	721	665	-22	-8	-28
Defense agency and other personnel	<u>143</u>	<u>152</u>	<u>130</u>	6	-14	-9
Total	1,073	873	795	-19	-9	-26

SOURCE: Congressional Budget Office based on data from the Department of Defense.

a. Excludes full-time National Guard and Reserve forces.

b. Adjusted numbers of civilian personnel for 1990 reflect the transfer of personnel from the military services to the Defense Exchange and Commissary Agency, the Defense Financial and Accounting Service, the Defense Information Systems Agency, the Defense Logistics Agency, and the Department of Defense Domestic and Overseas Dependent's Schools.

Although the magnitude of civilian reductions programmed in the Administration's plan for 1995 through 1999 is greater than the magnitude of reductions programmed for the military, the cuts are far less severe than those that occurred between 1990 and 1995. Between 1994 and 1995, the FYDP assumed that 50,000 personnel—about 5 percent of DoD's civilian employees—would leave the workforce voluntarily. Although that number may seem large, more civilians left DoD's ranks during 1994 than had been expected, so

the cuts required to reach end strength targets for 1995 will be smaller than 50,000. Even so, a reduction of that magnitude in one year is not out of step with recent history—DoD has decreased its civilian payrolls by 28,000 to 69,000 workers each year since 1990. Buyout authority, which the Congress authorized for DoD through 1997, gives the department an additional tool to manage the size of its civilian workforce by offering employees a lump sum to leave DoD's payroll voluntarily.

As with O&M spending, decreases in the number of civilian personnel employed by the military services tend to be overstated because responsibilities for some activities have been transferred from the military services to central defense agencies. Likewise, much of the apparent increase in end strengths at defense agencies is the result of transfers of civilian employees from the services. If one adjusts for transfers from the services to five agencies (the Defense Exchange and Commissary Agency, the Defense Finance and Accounting Service, the Defense Logistics Agency, the Department of Defense Domestic and Overseas Dependents' Schools, and the Defense Information Systems Agency), civilian end strength of the military services would fall by 22 percent between 1990 and 1995, whereas that of defense agencies would grow by just 6 percent. Other civilian personnel may have been transferred as well, but they are not reflected in these estimates.

Perhaps a more important issue is how the Administration's future plans for civilian personnel levels will affect DoD's ability to operate and support its forces. For some support functions the Defense Department may have an excess of civilian workers relative to the future work load expected by the military services. Centralized or joint service management of some support activities might also permit DoD to operate and support its forces with fewer workers. Other policies could increase the need for civilian workers. For example, some Members of Congress contend that DoD could preserve its combat capability (and possibly lower its costs) by converting military billets in support functions to civilian positions. DoD has begun identifying such positions. The task at hand for DoD planners is to determine what mix of military and civilian personnel best supports a smaller U.S. force structure and how to manage the transition to a smaller force.

Spending for Planned Investments Has Been Kept Stable. DoD's plans for 1995 call for real funding of its investment accounts—RDT&E, procurement, and military construction titles—to be about 40 percent below the 1990 level. Because DoD purchased large numbers of aircraft, ships, and tanks during the 1980s, it is able to postpone replacing many of its weapon systems until the next decade. As those systems continue to age, however, DoD will ultimately need to replace or refurbish its stocks of equipment.

The Administration's plan calls for stable investment spending averaging \$91 billion a year (\$85 billion in 1995 dollars) during the FYDP period. But within that overall category, the mix of spending would change. The Bush Administration cut procurement funding dramatically between 1990 and 1993 while keeping spending for research and development high—a pattern that the Clinton Administration continued in 1994 and 1995. By the end of the decade, however, the Administration plans to shift DoD budget resources back into procurement as the services begin to buy the F-22 and F/A-18E/F aircraft, the new attack submarine, and the Comanche helicopter. Total investment spending would remain stable under the FYDP because RDT&E spending will decline toward the end of the decade as those weapon systems move out of their development phases and into production.

Army procurement spending will face the most severe decline, dropping 61 percent in real terms from its 1990 level by 1999 (see Table 7). Because the Army purchased a new generation of more sophisticated tanks, combat helicopters, and missiles during the 1980s, modernization is less of a priority within the Army's budget. Navy and Air Force investment spending would not be cut as severely as investment spending for the Army, and the two services show trends similar to those for DoD as a whole. Procurement spending by the Navy and Air Force has already faced its steepest decline—between 1990 and 1995—and is now to be followed by an infusion of resources toward the end of the decade. Conversely, spending for RDT&E would not experience as severe a percentage reduction during the early part of the FYDP but would then decline throughout the remainder of the decade. Relative to 1990 levels, the Air Force will face the smallest percentage cuts in procurement spending among the services.

CHANGES SINCE THE FYDP WAS RELEASED

There have been a number of developments since the Administration released its defense plan in February 1994.

Congressional Actions

A number of Congressional actions during debate over the 1995 budget could reduce the resources available for defense or raise DoD's costs.

Discretionary Caps Call for Real Cuts in Spending. Current restrictions on federal spending are quite tight. The Budget Enforcement Act of 1990 and the Omnibus Budget Reconciliation Act of 1993 (OBRA-93) set limits on

discretionary spending through 1998 in order to restrain the federal budget deficit (see Table 8). Those caps effectively freeze discretionary spending in nominal terms, calling for a 9 percent real reduction in total discretionary spending by 1998 relative to the 1994 level.

The Violent Crime Prevention Act, which was signed into law in September 1994, could further restrict some types of discretionary spending. The act establishes a Violent Crime Reduction Trust Fund, which will finance federal, state, and local law enforcement or crime prevention programs with savings from reducing federal civilian employment under guidelines set in the Federal Workforce Restructuring Act of 1994. But the Crime Prevention Act also effectively lowers the discretionary spending cap applicable to most defense spending by establishing two sets of spending lids: one for crime enforcement and prevention programs and one for all other discretionary spending. By separating funds for crime programs, the act could further re-spending. By separating funds for crime programs, the act could further re-

TABLE 7. PROPOSED PROCUREMENT AND RDT&E SPENDING, BY SERVICE
(By fiscal year)

	Budget Authority (Billions of 1995 dollars)			Real Percentage Change		
	1990	1995	1999	1990- 1995	1995- 1999	1990- 1999
Army						
Procurement	16	6	6	-62	3	-61
RDT&E	6	5	3	-13	-37	-45
Navy and Marine Corps						
Procurement	40	17	22	-58	33	-44
RDT&E	11	9	6	-18	-31	-43
Air Force						
Procurement	35	18	22	-48	21	-37
RDT&E	16	12	9	-21	-27	-42

SOURCE: Congressional Budget Office based on data from the Department of Defense.

NOTES: For the purposes of this table, the values for the National Defense Sealift Fund over the 1995-1999 period were included in Navy procurement spending and excluded from other adjustments.

RDT&E = research, development, test, and evaluation.

TABLE 8. HOW TIGHT ARE THE DISCRETIONARY SPENDING CAPS?
(By fiscal year, in billions of dollars of current budget authority)

	1995	1996	1997	1998	Total, 1995-1998
Discretionary Caps^a					
Violent Crime Reduction Trust Fund	2	4	5	6	17
All other discretionary spending	<u>516</u>	<u>514</u>	<u>522</u>	<u>525</u>	<u>2,077</u>
Total	518	518	527	531	2,094
Funding Needed to Preserve Real 1994 Spending Level ^b	518	540	557	579	2,194
Amount Over Caps	0	22	30	48	100

SOURCE: Congressional Budget Office.

a. CBO's August 1994 estimate of future end-of-session discretionary spending limits.

b. Includes adjustments for inflation of about 3 percent a year.

strict spending for defense, international, and noncrime domestic programs, unless some of those programs are eligible for funding under the trust fund.

In 1991 through 1993, three separate caps applied to defense, international, and domestic appropriations, but in 1994 through 1998, a single limit applies to all discretionary spending. The absence of "firewalls" between defense and other types of discretionary spending means that the Administration and the Congress must evaluate their priorities among those categories of programs. Under its plan, the Administration would cut real annual spending for national defense (including DoD, Department of Energy spending on nuclear weapons production and environmental cleanup, and other defense-related programs) by about 12 percent by 1998 relative to 1994 levels. Those cuts would account for nearly 80 percent of total reductions in discretionary spending over the 1995-1998 period.²² International and domestic programs would experience real cuts of 10 percent and 5 percent, respectively, under the Administration's plan, but they would account for just

22. CBO, "Planning for Defense," p. 5.

20 percent of the overall reduction. If the Congress and the Administration chose to accommodate higher defense costs over the next several years, they would also have to cut nondefense spending by the same amount in order to abide by the discretionary spending caps.

The Concurrent Budget Resolution Could Cut Discretionary Spending Further. The Concurrent Resolution on the Budget for 1995, which was passed in May 1994, could cut \$26 billion in budget authority and \$9 billion in outlays from discretionary spending between 1995 and 1998, relative to the caps contained in OBRA-93.²³ Those additional cuts were included in the Senate's budget resolution, with higher levels of discretionary spending in those years subject to a point of order. The Congress has not allocated those cuts (or, indeed, any discretionary spending) among federal agencies for the 1996-1998 period, but defense spending accounts for roughly half of all discretionary spending. In 1995, DoD's budget was spared: of about \$7 billion in cuts to discretionary budget authority under the budget resolution, final appropriation actions cut less than \$2 billion from the President's request for national defense.

It is important to note that additional cuts set by the Senate for 1996 through 1998 are not necessarily binding for those years. According to the 1995 resolution, future budget resolutions could override those targets by a three-fifths vote of the Senate. For that reason, what is represented as a \$26 billion reduction in discretionary budget authority may or may not be imposed, particularly in light of the substantial changes in the makeup of the Congress.

Pay Raises Are Likely to Be Higher than Under the Administration's Plan. Under current guidelines, civil servants receive two types of raises, unless the President proposes and the Congress approves other amounts. The first is tied to the employment cost index, a measure of wage costs observed in the economy as a whole. Federal civilian workers receive an increase equal to the percentage increase in the ECI minus one-half of a percentage point as an across-the-board pay increase. The second adjustment to pay is a locality increase that varies by city and is designed to narrow gaps between federal and local pay scales. Although federal civilian employees have been eligible for the combination of across-the-board raises and locality pay adjustments since 1992, the President did not request nor did the Congress approve pay raises as large as guidelines would allow for either 1994 or 1995.

23. Several press articles have stated that the 1995 budget resolution would cut discretionary budget authority by \$31 billion and outlays by \$13 billion over the 1995-1999 period relative to the budget caps. But OBRA-93 only specifies discretionary caps through 1998, and the language of the resolution itself only includes discretionary cuts through 1998.

Under equivalent guidelines, military personnel will also receive an across-the-board pay raise equal to the ECI minus one-half of a percentage point, but they will not receive a locality pay adjustment. They do, however, receive some forms of compensation other than basic pay that vary with the local cost of living, such as housing allowances.

For 1995, the Congress approved pay increases for both military and civilian workers that were higher than those proposed by the Administration. Military personnel will receive a 2.6 percent across-the-board pay raise. Civilians will receive a 2.0 percent across-the-board raise, and locality adjustments for those who are eligible will add another 0.6 percent to the federal civilian payroll. By comparison, the Administration had budgeted only a 1.6 percent across-the-board raise for 1995 within its FYDP, and it would have held pay raises a full percentage point below current law through the remainder of the decade. CBO estimates that pay raises granted to military and civilian workers for 1995 will add \$5.6 billion to payroll costs over the 1995-1999 period.

Under available projections of the ECI and current guidelines, future pay raises could add to the FYDP's costs as well. Raises for military personnel would be an additional \$5.6 billion, and comparable raises for DoD's civilian employees would add another \$3.6 billion. Carrying out the locality pay adjustment according to schedule would require \$7.9 billion. Altogether, future pay raises could total \$17 billion over the 1996-1999 period. Note, however, that the Administration's projections of the ECI for 1996 are likely to be revised downward, which would lower the cost of providing pay raises. The Administration and the Congress could also choose to grant pay increases different from current guidelines, as they did in 1994 and 1995. Indeed, although the Administration has proposed full pay raises for military personnel throughout the remainder of the decade, it has remained noticeably quiet on the issue of civilian raises.

Possible Additional Adjustments for Covering Higher Inflation Costs

When the Administration released its FYDP, it included a \$20.1 billion negative adjustment—an acknowledgment that future cuts might be necessary to cover the approximate cost of higher inflation expected over the 1995-1999 period. That \$20 billion gap resulted when the Office of Management and

Budget (OMB) revised its inflation forecasts upward at the end of 1993 relative to the projections originally used to create the defense budget.²⁴

OMB's revised inflation forecast as of July 1994 has remained unchanged (see Table 9). If inflation projections had declined, that trend would have reduced the need for any future programmatic changes in the budget. But current projections suggest that some additional cuts will be necessary, although the precise magnitude of the effects of inflation is unclear. CBO's latest forecast projects lower rates of inflation than does OMB, which could significantly reduce the size of future adjustments required over the 1995-1999 period. According to Administration officials, the most recent inflation projections—which are due to be released with the proposed budget for 1996—could substantially lower the need for future adjustments.

Actions by the Administration

In the fall of 1994, the Administration conceded that its defense plan was likely to face a shortfall larger than the \$20 billion reduction described as "future adjustments." In testimony before the Senate Armed Services Committee, Deputy Secretary Deutch stated that the Administration considered its defense shortfall to be on the order of \$40 billion; that figure included inflation, the cost of higher pay raises, and some additional funding to support Army readiness and initiatives to improve the quality of life for military personnel.²⁵ In preparing for its 1996-2001 defense plan, the Administration has taken several steps to deal with the shortfall, but it is not yet clear whether those actions are sufficient to address the entire amount.

Savings from Acquisition Reform Are Not Reflected in DoD's Budget. In developing the Administration's entire budget for 1995, OMB included estimates from the National Performance Review that reform of the federal procurement system would result in savings in budget authority of \$0.7 billion in 1995 and \$12.3 billion over the 1995-1999 period. Those estimated savings were included in the Administration's 1995 budget as an unallocated governmentwide allowance. For 1995, DoD was asked to absorb about 45 percent of that year's value—\$315 million. If DoD was required to face that

24. The pattern of DoD's adjustments from 1996 to 1999 is not consistent with an inflation overrun: the reductions specified for the earlier part of the period are larger than those for the end of the decade. OMB attributes that pattern to other programmatic adjustments that were made simultaneously.

25. Statement of John Deutch, Deputy Secretary of Defense, before the Senate Armed Services Committee, September 20, 1994.

TABLE 9. PERCENTAGE CHANGE IN ESTIMATED INFLATION,
FISCAL YEARS 1995-1999

	1995	1996	1997	1998	1999
Administration and CBO Estimates from 1993	2.3	2.3	2.2	2.2	n.a.
Administration's Estimates from February 1994	2.8	2.9	3.0	3.0	3.0
Current Administration Estimates	2.8	2.9	3.0	3.0	3.0
Current CBO Estimates	2.5	2.6	2.7	2.7	2.7

SOURCES: Congressional Budget Office and Office of Management and Budget.

NOTE: Values are estimated increases in the implicit deflator for gross domestic product.

n.a. = not available.

same share of total acquisition savings from 1996 through 1999, it would need to cut its plan by \$5.1 billion, either by making programmatic changes or by reducing acquisition costs.

Note that it is inappropriate to add the reductions associated with acquisition reform to cuts that may result from the Concurrent Resolution on the Budget. The two are not additive but parallel—savings achieved as a result of procurement reform in DoD's budget would help meet the targets set in the budget resolution.

The Administration Has Decided to Seek Higher Defense Spending. On December 1, 1994, the President announced that he plans to seek an additional \$25 billion for defense over the 1996-2001 period. Of that amount, \$10 billion would be added during the period covered by CBO's analysis, 1996 through 1999. Administration officials have stated that the funds would help to maintain military readiness, raise military pay, and support programs to improve the quality of life of military personnel. In addition, the President will seek a supplemental appropriation of more than \$2 billion for 1995 to replace funds spent on contingency operations.

Directives for Additional Cuts Could Help Meet the Shortfall. According to press accounts, in April 1994, the Office of the Secretary of Defense (OSD)

directed the military departments to reduce their 1996-1999 budgets by nearly \$10 billion.²⁶ The directive was part of OSD's fiscal guidance to the services—that is, DoD's set of assumptions to be used in planning its budgets for 1996 through 2001. Although those reductions address only half of the Administration's reported \$20 billion future adjustment, the services have probably been participating in other "budget scrubs" as well.

In mid-August 1994, Deputy Secretary Deutch sent a memo to the military departments asking that they examine the implications of delaying or canceling nine major weapon acquisition programs, including some considered to be among the highest priorities of the military services, such as the Air Force's F-22 fighter (see Table 10). The sending of the memo suggests that the Administration recognized a significant mismatch between available resources for defense and the force structure planned in its Bottom-Up Review.

Secretary Perry announced the Administration's proposed cuts on December 9, 1994. Two of the nine programs face the most severe changes: the Tri-Service Standoff Attack Missile will be canceled, and although the Army will purchase two prototypes of its Comanche helicopter, no others will be produced during the 1996-2001 period. Five other weapons programs will be affected as well (primarily delayed or stretched out): the DDG-51 destroyer, the new attack submarine, the V-22 Osprey aircraft, the advanced amphibious assault vehicle, and the F-22 fighter. The Administration expects that its proposed changes will reduce defense costs by \$7.7 billion over the 1996-2001 period. Approximately \$6 billion of that amount would affect the period covered by CBO's analysis.

For most of the weapon systems at issue, the Administration had asked the services to propose alternative programs that would presumably cost less during the FYDP period (although in some cases they would cost more over the long run). If instead the Administration had proposed canceling all of those major programs without including funds for alternative systems, then total spending during the FYDP period would fall by \$47 billion.

Additional Cuts in Civilian Personnel Could Help Address the Shortfall. Two memos released by the Under Secretary of Defense for Personnel and Readiness, Edwin Dorn, in the summer of 1994 suggest that the Administration may raise its targets for cuts in civilian personnel levels. New guidelines will reflect reductions made in accordance with the National Performance Review

26. Margo MacFarland, "OSD Directs Services to Cut Nearly \$10 Billion Between FY-96 and FY-99," *Inside the Pentagon* (May 5, 1994), p. 1.

TABLE 10. FUNDING IN THE 1995-1999 FUTURE YEARS DEFENSE PROGRAM FOR WEAPON SYSTEMS BEING EVALUATED FOR DELAY OR TERMINATION, BY SERVICE (In billions of current dollars of budget authority)

Weapon System	Funding
Army	
Comanche helicopter	3
Advanced Field Artillery System	1
Air Force	
Joint Primary Aircraft Training System	1
F-22 fighter	13
Tri-Service Standoff Attack Missile	2
Navy and Marine Corps	
V-22 Osprey aircraft	5
DDG-51 destroyer	15
New attack submarine	7
Advanced amphibious assault vehicle	<u>a</u>
Total	47

SOURCE: The list of weapon systems is based on John Deutch, Deputy Secretary of Defense, "Memorandum for Members of the Defense Resources Board" (August 18, 1994). The funding values were estimated by the Congressional Budget Office based on data from the Department of Defense.

a. Less than \$500 million.

and the Federal Workforce Restructuring Act of 1994. The ultimate size of new employment targets will remain uncertain until the Administration introduces its budget plan for 1996. But to illustrate the effects of such a policy, if the Administration reduced DoD's civilian workforce by an additional 40,000 people between 1995 and 1999, it could lower defense costs by about \$5 billion. Those higher targets would ultimately reduce DoD's civilian employment by 30 percent over the 1990-1999 period, which is comparable to the reduction planned for active-duty military personnel.

OTHER PRESSURES ON THE FYDP'S "TOP LINE"

Several other factors lead CBO to conclude that DoD is likely to face significant upward pressure on its costs during the remainder of the decade.

"Nontraditional" Defense Spending

The term "nontraditional" has been used to refer to a number of activities managed and financed through the Defense Department that do not relate directly to DoD's established role of preparing to fight wars. A broad interpretation of nontraditional spending might include DoD's environmental cleanup programs, efforts to convert defense manufacturers to civilian or dual-use production, drug interdiction campaigns, and the like (see Table 11). But the term is a misnomer, since DoD has been conducting several of those activities for many years. The department has, for example, long supported research and development into dual-use technologies, but only recently has the Administration chosen to emphasize them as a matter of policy.

Some Members of Congress argue that DoD's responsibilities have expanded at the same time that its budget has contracted, and the resulting squeeze on resources could jeopardize the readiness of U.S. forces to conduct combat operations. Although it is difficult to identify a consistent stream of budget data for many of these nontraditional categories of spending, it does appear that between 1990 and 1994 (a period of real cuts in the total defense budget), funding for several categories of such activities has grown, particularly for environmental cleanup programs.

Environmental Cleanup Costs Are Likely to Continue to Grow. The Administration plans to spend about \$12 billion on environmental restoration (one category of its environmental programs) during the 1995-1999 period. Historically, actual costs for cleanup projects have been two to three times higher than DoD's original estimates. If history is a guide, accomplishing those environmental projects planned within the FYDP may cost DoD about \$20 billion more than it has budgeted.²⁷ Note, however, that this estimate may overstate the problem; DoD may be better able to project environmental cleanup costs, now that it has more experience with such projects. The Administration may also choose to scale back the pace or scope of its environmental programs during the FYDP period if growth in project costs is excessive--that is, unless contractual agreements with other agencies and local communities limit its ability to alter its cleanup plans.

Contingency Operations Could Add Unanticipated Costs. One of the most contentious issues facing defense planners today is the role that the U.S. military should play in peacekeeping and other contingency operations. If the United States continues to become involved in operations such as those in

27. CBO, "Planning for Defense."

TABLE 11. "NONTRADITIONAL" DEFENSE SPENDING, FISCAL YEARS 1990-1995
(In billions of 1995 dollars of budget authority)

	Actual				Estimated	
	1990	1991	1992	1993	1994	1995
DoD Environmental Activities	1.6	2.8	4.0	5.3	5.6	5.2
Defense Conversion and Dual-Use Technology ^a	0.6	0.7	1.2	2.9	3.4	3.3
Drug Interdiction and Counterdrug Activities	0.5	1.2	1.3	1.2	0.9	0.7
Former Soviet Union Threat Reduction	0	0	0.2	0.4	0.4	0.4
Humanitarian Assistance	b	b	0.2	0.2	0.1	0.1
Other Miscellaneous ^c	<u>0.8</u>	<u>1.0</u>	<u>1.2</u>	<u>1.3</u>	<u>1.4</u>	<u>1.3</u>
Total	3.5	5.7	8.0	11.2	11.8	10.9
Memorandum: Peacekeeping ^d	n.a.	n.a.	n.a.	1.5	1.5	2.3 ^e

SOURCE: Adapted from Stephen Daggett and Keith Berner, "Items in the Department of Defense Budget That May Not Be Directly Related to Traditional Military Capabilities," Congressional Research Service Memorandum (March 21, 1994).

NOTES: These programs were identified from a broad range of activities that may or may not contribute to DoD's military capabilities.

n.a. = not available.

- a. Because of accounting changes, values for 1990 to 1992 are not strictly comparable to those for 1993 to 1995.
- b. Less than \$50 million.
- c. This category includes a number of small programs that are financed primarily in the Operation and Maintenance title, such as funding for the Summer Olympics, World Cup Soccer, disaster relief, and a variety of museum projects.
- d. Peacekeeping operations have been accommodated in the past through supplemental appropriations.
- e. Administration officials have announced that they plan to request a \$2.3 billion supplemental appropriation early in calendar year 1995.

Somalia, Rwanda, and Haiti, DoD could face higher-than-anticipated costs and could be forced to cut other activities to accommodate those expenditures. Some Members of Congress believe that the U.S. military's responsibilities in peacekeeping operations have expanded too quickly and that the resources they require reduce those needed to ensure a strong response if the United States becomes involved in combat operations more closely linked to its national interests. Other Members argue, however, that in the current geopolitical environment, it is much more likely that the U.S. military will become involved in peacekeeping and humanitarian missions than in major regional conflicts.

There is also the question of how peacekeeping operations should be financed. Under current practice, the Congress passes supplemental appropriations for the incremental costs of U.S. involvement in wars (such as that in the Persian Gulf) and for unilateral actions associated with peacekeeping and other contingency operations. In 1993, DoD received \$1.4 billion in supplemental appropriations to cover the costs of unilateral activities in northern and southern Iraq and Somalia. For 1994, DoD received a \$1.2 billion supplemental for operations in Somalia, Bosnia, Iraq, and Haiti. DoD received an additional \$299 million for costs accrued in 1994 associated with relief operations in Rwanda and processing migrants in and around Cuba.

That second installment of funding, however, was not appropriated until the start of fiscal year 1995, and the quick succession of U.S. operations in Rwanda, Cuba, Haiti, and Kuwait triggered a cash flow problem. DoD reduced funding for training and operations as a result. Administration officials have stated that they intend to request a supplemental appropriation of more than \$2 billion in 1995.

In a related matter, the Administration had proposed funding part of the U.S. assessment for United Nations contingency operations—some \$300 million for 1995—in the defense budget. Historically, those assessments have been financed through Department of State funds, but because peacekeeping is a part of DoD's national security strategy, Administration officials argue that part of the costs should be borne within its budget. Critics of the measure contend that it would be more appropriate to apply the money to budget accounts that support the readiness of U.S. troops. Ultimately, the Congress did not support this measure in its defense authorization and appropriation bills for 1995.

Cost Growth in Acquisition Programs

The Administration proposes to spend \$423 billion to develop and procure major weapons and other equipment between 1995 and 1999—an average of \$85 billion per year. Although the FYDP envisions beginning the development of fewer weapons than previous defense plans, the Administration's blueprint includes a number of large weapons programs that are likely to experience cost growth. Examples are the Air Force's F-22 fighter, the Navy's new attack submarine, and the Army's Comanche helicopter.

History has shown that the cost of complex military systems tends to grow beyond early projections, particularly while the systems are under development and in the first few years of production. But how much pressure might DoD experience from growth in weapons costs during the 1995-1999 period? Because it is difficult to make a precise estimate, CBO tried to put some bounds on the magnitude of likely cost growth.

Research has shown that unanticipated cost growth has averaged 20 percent to 50 percent over the life of weapons programs, including both the development and production phases.²⁸ That research examined a variety of programs that differed significantly in type, technical difficulty, stage of development, and duration. Analysts at the Institute for Defense Analyses (IDA), for example, found that in the programs they observed, cumulative cost growth measured from estimates made at the start of engineering and manufacturing development (Milestone II) ranged as high as around 100 percent for tactical missiles and combat vehicles to about 15 percent for ships.²⁹ Note, however, that cost growth for a weapon system during any five-year interval of its development and production cycle may differ considerably from cost growth over its entire life.

CBO looked at plans for procurement and RDT&E spending for nearly 50 major weapon systems that are at risk of significant cost growth. Since most weapons experience little, if any, cost growth late in their production cycles, CBO did not include spending for mature programs. However, most new systems were included: the Army's Comanche and Apache Longbow programs; the Navy's F-14 fighter upgrade and the F/A-18E/F and V-22 aircraft; the Seawolf and the new attack submarine programs; the Air Force's F-22 fighter and Tri-Service Standoff Attack Missile; and spending for theater missile defense programs, among others. Using budget authority planned for

28. See, for example, Tyson and others, "The Effects of Management Initiatives," and Jeff Drezner and others, *An Analysis of Weapon System Cost Growth*, MR-291-AF (Santa Monica, Calif.: RAND, 1993).

29. Tyson and others, "The Effects of Management Initiatives," pp. ES2-ES3.

major weapon systems as recorded in recent selected acquisition reports (SARs) and Congressional data sheets, CBO found that spending for those programs came to \$94 billion, or 22 percent of total procurement and RDT&E funding planned for the 1995-1999 period.³⁰

The degree to which a program is at risk of cost growth depends, in part, on whether its costs have already risen and whether budget planners have anticipated more growth in their spending proposals for the future. To create an upper-bound estimate, CBO assumed that DoD acquisition planners had not built cost growth into the FYDP estimates. For each high-risk weapon system, CBO increased planned spending by the average percentage cost growth observed by IDA analysts for comparable types of platforms or systems.³¹ As an example, for tactical aircraft, CBO applied the IDA estimate of 22 percent growth in development costs and 25 percent growth in production costs to those programs' planned levels of RDT&E and procurement spending for the 1996-1999 period.³²

This approach yields an estimate of \$31 billion in additional costs during the FYDP. However, that estimate probably overstates the problem because it fails to take into account the extent to which cost growth was already reflected in planned levels of spending. To estimate a lower bound, CBO assumed that all but the average annual unanticipated increase in costs was already reflected in planned spending for high-risk systems. For the previous example of tactical aircraft programs, IDA analysts estimated that such programs experienced unanticipated cost growth of 22 percent over a six-year developmental period and growth in procurement costs of 25 percent over a production period of about 11 years. Converting those two averages into annual rates yields unanticipated cost growth of 3 percent per year for RDT&E spending and 2 percent per year for procurement. Applying those annual rates to planned spending for high-risk systems yields an estimate of \$8 billion in cost growth from 1996 to 1999.

CBO's range of \$8 billion to \$31 billion answers the question of how much weapon system costs might grow if current acquisition plans were unchanged through 1999. But a different question might be more appropriate:

30. The Defense Department submits SARs to the Congress for those systems that require more than \$300 million in RDT&E funding or an eventual total expenditure of \$1.8 billion for procurement (as measured in 1990 dollars). Classified programs are not included.

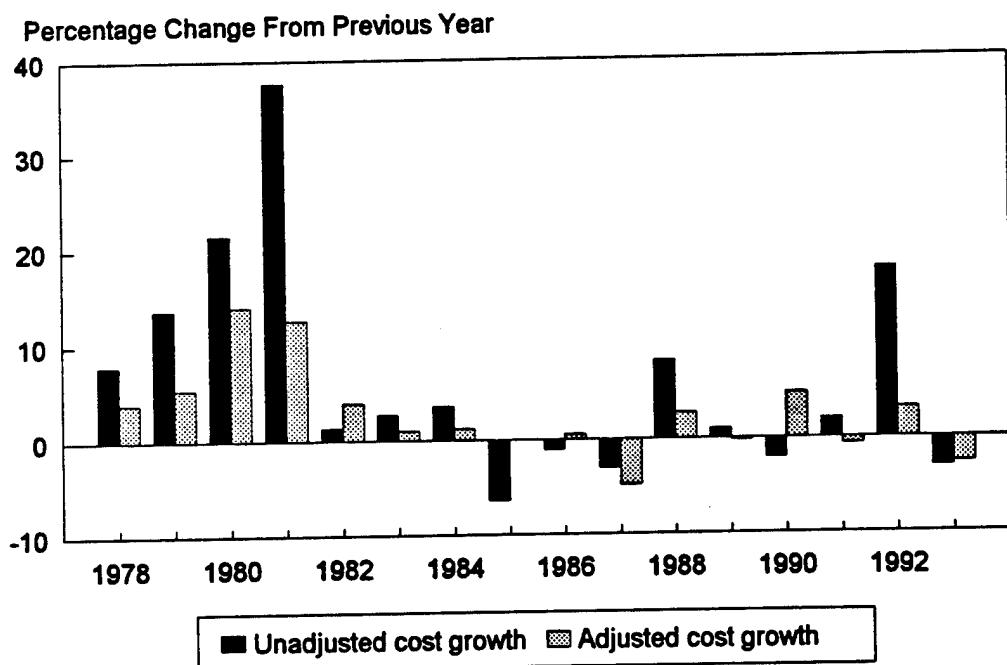
31. Tyson and others, "The Effects of Management Initiatives."

32. Because DoD planners had relatively up-to-date information about the status of high-risk programs when they developed their budget estimates for 1995, CBO assumed that program managers would be able to manage unanticipated cost growth in that year through relatively minor changes to program plans.

How will rising weapons costs affect total DoD appropriations for procurement and development? As weapons become more costly than expected, the Congress and the Administration usually react by canceling some programs and stretching out others. That process in turn reduces the pace of modernization and, to some degree, military capability. As acquisition programs are stretched out, unit costs grow. In any given year, it is difficult to predict the net effect of those actions and reactions on DoD's total investment spending.

One measure of the unpredictable nature of defense investment spending is the annual change in total program acquisition costs of major weapons programs (see Figure 2). Major weapon systems are defined here as those programs for which DoD submits a SAR to the Congress. Within the SARs, DoD estimates the RDT&E, procurement, and military construction costs for

FIGURE 2. ANNUAL CHANGE IN TOTAL PROGRAM ACQUISITION COSTS FOR MAJOR WEAPON SYSTEMS, FISCAL YEARS 1978-1993



SOURCE: Congressional Budget Office.

NOTE: Program acquisition costs include actual past and expected future expenditures for research, development, test, and evaluation; procurement; and military construction. Unadjusted values are changes over the previous year's value in the grand total of the Defense Department's current estimate of program acquisition costs for all major weapon systems. Adjusted values exclude changes associated with revised assumptions about inflation and changes in the expected quantities of weapons to be procured. Classified programs are not included.

major systems over their entire acquisition cycle—that is, actual costs for items or services that have already been delivered as well as the expected costs of purchases not yet completed. From year to year, the total program acquisition cost of SAR systems changes because some new weapons are added and those that are terminated or have completed most of their production are dropped. The percentage change in that value between any two years reflects changes in the mix of SAR systems, the expected quantity of weapons to be purchased, assumptions about future rates of inflation, and the combined cost growth of each weapon system.

Note that the annual changes shown in Figure 2 do not appear to follow any particular pattern, even after adjustments in assumptions about inflation and procurement quantities. In several recent years, total spending for SAR programs actually declined, although individual weapon systems have continued to experience significant cost growth. That outcome is the result of the Congress's and the Administration's canceling, stretching out, or deferring many major modernization programs.

The Next BRAC Round

One other area of concern within the Administration's plan is base closure costs and savings. The funds programmed within the FYDP for the next base realignment and closure round in 1995 do not appear to match DoD's goals for that process. In a January 1994 memo, William Perry, then Deputy Secretary of Defense, noted that DoD's goal for the BRAC round scheduled for 1995 would be to reduce plant replacement value by 15 percent, roughly the same amount as that achieved by all three previous BRAC rounds combined. Yet Secretary Perry and Joint Chiefs of Staff Chairman John Shalikashvili seemed to back away from that goal somewhat in a May 1994 press release that noted the following:

Too much, too soon jeopardizes our current program; too little, too late jeopardizes our future program. These are the considerations that will determine the size and shape of the closings we will recommend to the Base Closure and Realignment Commission for 1995. If closures beyond the amount we can responsibly accomplish in 1995 are required or force structure requirements change, we will seek authority for future BRAC rounds.³³

33. Joint press release of Secretary of Defense William J. Perry and Chairman of the Joint Chiefs of Staff General John Shalikashvili, May 11, 1994.

A more recent press report suggests that service officials are once again being told to close bases aggressively in the 1995 round in order to lower DoD's overhead costs.³⁴

A relatively small amount has been budgeted for the one-time costs associated with closing bases and other facilities. The Administration's FYDP includes a total of \$11.4 billion for the up-front costs associated with base realignments and closures from the 1988, 1991, 1993, and 1995 rounds.³⁵ Only \$2.6 billion of that total, however, is for the 1995 round, and no funds have been included for BRAC costs in 1999. According to DoD data, the FYDP assumes \$16.4 billion in savings associated with base closures from all four rounds combined (excluding revenues from the sale of land), \$3.8 billion of which should result from the 1995 round.

How does that funding compare with the funding provided for previous BRAC rounds? As a rough approximation, CBO analyzed the latest available data on the first four years of budget requests for the 1988, 1991, and 1993 rounds (BRAC-88, BRAC-91, and BRAC-93, respectively). If those funding streams were to have begun in 1996—the first year in which DoD will request budget authority for closure costs associated with the 1995 round—DoD would have requested \$3.0 billion for BRAC-88, \$4.3 billion for BRAC-91, and \$7.0 billion for BRAC-93 within the current FYDP, or a total of \$14.2 billion (see Table 12). Instead, the Administration has budgeted only \$2.6 billion. Thus, if the magnitude of the next closure round was equal to that of the first three combined, DoD would have budgeted \$11.6 billion too little for up-front closure costs.

In fairness, DoD may have learned from its earlier experiences how to conduct closures more cost-effectively, or it may have realized that the pace of closure operations proceeds more slowly than under original plans and adjusted its associated cost streams accordingly. Additionally, the types of base closures in BRAC-95 may differ somewhat from earlier ones—they may, for example, involve relocating fewer personnel and facilities. Nonetheless, the difference between the Administration's plan and recent experience is striking.

34. Craig Rasmussen, "Military Services Told to Close as Many Bases as Possible," *Defense Week* (June 6, 1994), p. 13.

35. Funds for base closure activities—such as moving equipment and personnel, cleaning up contaminated sites, and the like—are appropriated within a special BRAC account rather than through numerous appropriation accounts. Savings that result from base closures, however, are spread throughout the budget, primarily under the O&M title.

TABLE 12. PROGRAMMED COSTS FOR BRAC-95 COMPARED WITH
PREVIOUS BRAC ROUNDS, FISCAL YEARS 1995-1999
(In billions of current dollars of budget authority)

	1995	1996	1997	1998	1999	Total, 1995-1999
If BRAC-95 Is Like BRAC-88	0	0.6	1.2	0.8	0.5	3.0
If BRAC-95 Is Like BRAC-91	0	0.4	1.8	1.7	0.4	4.3
If BRAC-95 Is Like BRAC-93	0	<u>1.2</u>	<u>2.5</u>	<u>2.8</u>	<u>0.5</u>	<u>7.0</u>
Total	0	2.1	5.4	5.2	1.5	14.2
Funding for BRAC-95 Under the Future Years Defense Program	0	0.7	0.9	1.0	0	2.6
Difference	0	1.4	4.5	4.2	1.5	11.6

SOURCE: Congressional Budget Office based on data from the Department of Defense.

NOTES: Values for BRAC-88, BRAC-91, and BRAC-93 (BRAC rounds for 1988, 1991, and 1993, respectively), are one-time costs in the BRAC account less land revenues.

BRAC = Base Realignment and Closure Commission.

An offsetting trend can be observed in the FYDP's assumptions about BRAC savings: the plan includes \$3.8 billion in savings associated with the 1995 round. Yet the first three closure rounds assumed \$1.1 billion, \$3.5 billion, and \$3.5 billion in savings, respectively, during their first four years, or a total of \$8.0 billion (see Table 13).³⁶ Other analyses maintain that DoD has tended to overstate the amount of costs avoided (or savings) that result from having fewer employees on the payroll and fewer facilities to operate and maintain when bases are closed.³⁷ It is difficult to evaluate that criticism because DoD has not tracked the magnitude of costs that it has actually avoided. If savings from the first three closure rounds are reasonable estimates of actual savings and the 1995 round is the same size as the first three combined, DoD will have underestimated BRAC savings in the FYDP by some \$4.3 billion.

36. The up-front costs of base closures tend to outweigh savings during the first few years, but savings continue to accrue long after closing costs cease.

37. See, for example, GAO, "Future Years Defense Program."

TABLE 13. PROGRAMMED SAVINGS FROM BRAC-95 COMPARED WITH
PREVIOUS BRAC ROUNDS, FISCAL YEARS 1995-1999
(In billions of current dollars of budget authority)

	1995	1996	1997	1998	1999	Total, 1995-1999
If BRAC-95 Is Like BRAC-88	0	a	0.1	0.3	0.5	1.1
If BRAC-95 Is Like BRAC-91	0	0.3	0.5	1.1	1.6	3.5
If BRAC-95 Is Like BRAC-93	0	<u>0.1</u>	<u>0.4</u>	<u>1.2</u>	<u>1.8</u>	<u>3.5</u>
Total	0	0.5	1.0	2.7	3.9	8.0
Savings from BRAC-95 Included in the Future Years Defense Program	0	0.4	0.6	0.8	2.0	3.8
Difference	0	0.1	0.4	1.9	1.9	4.3

SOURCE: Congressional Budget Office based on data from the Department of Defense.

NOTES: Savings do not include land revenues.

BRAC = Base Realignment and Closure Commission; BRAC-88, BRAC-91, BRAC-93, and BRAC-95
= BRAC rounds for 1988, 1991, 1993, and 1995, respectively.

a. Less than \$50 million.

If the combination of the first three rounds of base realignments and closures is representative of the costs of a fourth round of the same size, DoD might need as much as \$7.3 billion in additional funding to conduct the 1995 round (\$11.6 billion in costs minus \$4.3 billion in savings). By reducing the scope of that round, DoD could avoid some of the up-front costs associated with reducing its workforce, moving personnel and equipment, and cleaning up base facilities. But stretching out the BRAC process would mean carrying the costs of operating bases throughout the FYDP.

HOW LARGE IS THE SHORTFALL IN THE FYDP?

It is difficult to pinpoint an overall shortfall for the FYDP because each of the factors outlined above is a type of risk—an outcome that may or may not happen. For example, the Congress granted military personnel a 2.6 percent pay raise for 1995, and the Administration has indicated recently that it plans

to include military pay raises that follow current guidelines in its budget through the remainder of the decade. Therefore, it is quite likely that DoD will face higher pay costs over the period. But less is known about the magnitude of cost growth for weapon systems or environmental cleanup. To add up worst-case cost estimates for a broad array of factors is tantamount to assigning a high probability that each will occur, an assumption that is without any particular foundation.

Nor does the worst-case method take into account the fact that DoD could make some adjustments in what it proposes to accomplish during the FYDP period. For example, the Administration might defer its plans for environmental cleanup, particularly those actions that are not directly related to closing bases or that do not involve immediate health risks. DoD might also reevaluate some of its funding priorities—perhaps scaling back some modernization projects.

But as a rough order of magnitude, DoD's costs are likely to be \$65 billion, or about 5 percent, higher than the Administration's plan for defense during the 1995-1999 period. That estimate takes into account those factors that have already changed or are likely to occur: larger pay raises than those assumed in the FYDP (\$23 billion), inflation at rates higher than initially projected (\$20 billion), unanticipated growth in weapon system costs (\$8 billion), a larger BRAC round (\$7 billion), and additional funding for the incremental costs of contingency operations (\$6 billion) and for quality-of-life initiatives proposed by the Administration (\$2 billion). If CBO includes higher cost growth for weapon systems and for environmental cleanup efforts, DoD's shortfall could rise to more than \$100 billion, or about 9 percent of planned spending.

CBO's \$65 billion estimate does not reflect the President's recent announcement that he plans to seek additional funds for defense, nor does it take into account the Administration's recent changes in weapons modernization programs. Together, those measures would reduce CBO's estimate to a shortfall of about \$47 billion in the 1995-1999 period, or 4 percent of total spending. Administration officials contend that their inflation projections (which are due to be released with the budget proposal for 1996) would further lower CBO's estimate.

ADDED COSTS OF FORCE STRUCTURE UNDER THE BOTTOM-UP REVIEW BEYOND 1999

The purchase of large numbers of weapon systems during the 1980s will allow DoD to live with less procurement spending during the 1990s. But that procurement holiday will not last forever—DoD is likely to need substantial increases in funding beyond 1999 in order to replace or modernize the forces it bought during the 1970s and 1980s.

Will current policies cause future problems for the defense budget? To address that question, CBO projected the costs of the Administration's Bottom-Up Review (BUR) force structure from the year 2000 to 2010. The projections below compile cost estimates made for each of the military services over the same period, as well as projections of costs for defensewide and defense agency activities, Department of Energy defense activities, and operations performed by other agencies that fall under the national defense budget category. Because the Administration has not published specific procurement plans for the period beyond 1999, CBO's estimates are based on what has been gleaned from statements and the stated goals of the Administration. Assumptions about the timing, cost, and production rates for specific weapon systems can be found in three companion pieces to this paper.³⁸

For each year, CBO made two estimates of national defense costs: one assuming that future Administrations would constrain the growth in costs of weapon systems and another in which costs for selected major systems grew at rates consistent with historical experience. Those estimates should not be interpreted as a range with statistical meaning. Instead, the range reflects two distinct sets of estimating assumptions that differ primarily according to whether they include cost growth for major weapons.

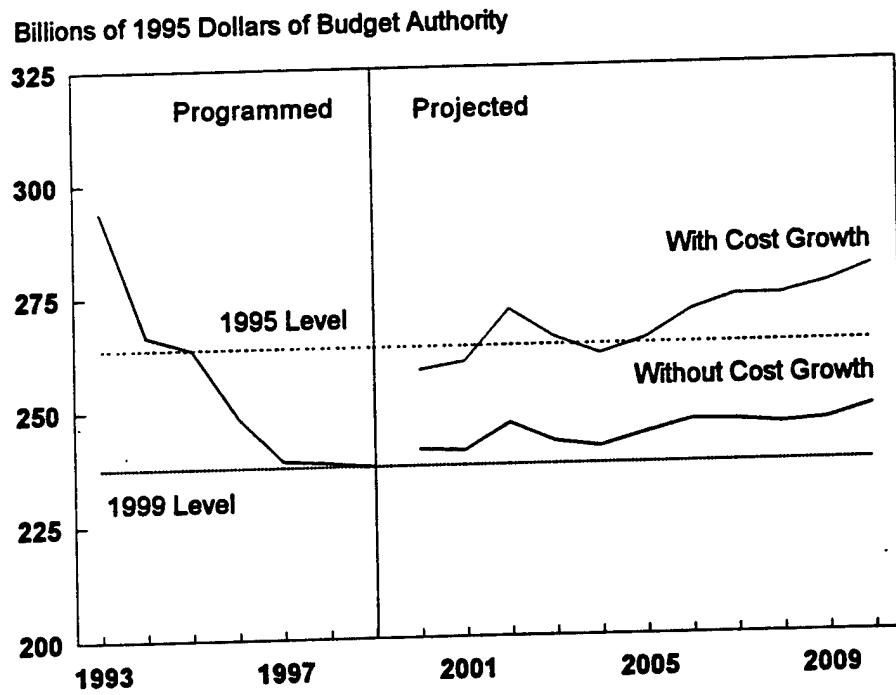
In this paper, CBO includes the effects of rising costs for weapons to show how significant that upward pressure may be. But those projections reflect costs of the BUR force structure and are not a prediction of what the national security *budget* might be.

38. Congressional Budget Office, "Long-Term Implications of the Administration's Plans for the Navy" (November 1994); "Long-Term Implications of the Administration's Plans for the Army" (November 1994); and "Long-Term Implications of the Administration's Plans for the Air Force" (November 1994).

Approximate Size of Increases to Accommodate Modernization Needs

Under CBO's assumptions, the Administration's plan for national defense spending for the 2000-2010 period would cost an average of \$7 billion to \$31 billion more per year (in 1995 dollars) than the level of spending programmed within the FYDP for 1999, or between 3 percent and 13 percent more (see Figure 3). That finding has major implications for policy options that the Congress and the Administration might pursue, since postponing modernization costs today could make the long-term situation worse. The costs of the BUR force structure would peak in 2002 because of the purchase of an aircraft carrier in that year. They would then increase toward the end of the decade as the Air Force begins procurement of an aircraft from the Joint Advanced Strike Technology program and the Navy increases the annual rate at which it procures F/A-18E/F aircraft.

FIGURE 3. LONG-TERM IMPLICATIONS OF THE ADMINISTRATION'S PLAN FOR NATIONAL DEFENSE SPENDING



SOURCE: Congressional Budget Office.

A future Administration will not necessarily need, say, a \$20 billion increase in defense spending in the year 2000. Instead, the Congress and the Administration are likely to make adjustments to both programmed levels of defense spending for 1999 and the number and timing of major procurement programs that are now under way. CBO's projections provide one estimate of how modernization of BUR forces might take place and the magnitude of funding increases that might be needed to achieve that procurement schedule.

CBO's Outlook for the Federal Budget Deficit

Rising defense costs could contribute to a higher federal deficit in the next decade. CBO's projection of the deficit assumes that the Congress makes no changes in current law or in policies that affect revenues and mandatory spending. Under those assumptions, the federal budget deficit would fall to \$162 billion in 1995 but would then begin to increase, rising to \$176 billion in 1996. The deficit would continue on an upward course to \$397 billion in 2004, the last year for which CBO has made a projection.³⁹ If the Congress chooses to fund the defense budget at a higher level in the coming decade without cutting nondefense programs by an equal amount, the federal budget deficit could be even higher.

The growth in the deficit after 1995 will be driven by increases in spending for two mandatory programs, Medicare and Medicaid, which have been growing by annual rates well above those for inflation in the economy as a whole. The projections assume that overall discretionary spending is limited to the amounts specified in OBRA-93 through 1998 and keeps pace with inflation thereafter, implying no real growth in that category of spending.

OPTIONS FOR ADDRESSING THE SHORTFALL

The Congress and the Administration may need to consider a broad spectrum of programmatic changes to address the potential mismatch between resources and force structure for the 1995-1999 period. This section outlines illustrative options that fall under four general approaches: increasing defense spending, constraining DoD's responsibilities, lowering DoD's costs of doing business, or reducing military capability. Some of the options described below could fall under more than one of the above approaches; restructuring roles and missions among the services, for example, might improve efficiency in DoD operations but could reduce military capability as well.

39. Congressional Budget Office, *The Economic and Budget Outlook: An Update* (August 1994), pp. 30-31.

Increase Defense Spending

The premise for the Administration's Bottom-Up Review was that U.S. forces should be able to fight and win two major regional conflicts nearly simultaneously—for example, one in the Persian Gulf and one on the Korean peninsula. There is considerable debate as to whether those forces—10 active (plus 5 reserve) Army divisions, 11 active (1 reserve) aircraft carriers, and 13 active (7 reserve) Air Force tactical fighter wings—would be able to achieve that objective. A March 1994 analysis by CBO argued that when the superior quality of U.S. equipment was taken into account, the United States would be able to bring considerable forces to bear.⁴⁰ But others believe that even if BUR forces were capable of the task in theory, the Administration's planned levels of defense spending are not adequate to keep those forces ready for conflict.

Under that line of reasoning, the Congress may choose to increase national defense spending over the remainder of the decade. But more defense spending does not necessarily guarantee enhanced readiness or greater military capabilities; it could also be used, for example, to retain facilities that might otherwise be considered excess. And under discretionary spending caps set through 1998, the Congress would need to cut nondefense programs by an amount equal to defense increases. Such actions may be difficult to achieve at a time when issues like crime, education, welfare reform, and health care reform occupy positions of considerable importance on the national policy agenda.

Limit DoD's Responsibilities

The policy alternatives described below could reduce the need for defense resources. But in order to forestall a significant shortfall in the defense budget, one would need to carry out all of those alternatives. The Congress and the Administration may want to consider pursuing some of the options in combination with policies that would have a larger effect on defense funding needs.

Cut Nontraditional Spending. Some types of spending not directly tied to operating and supporting forces might be cut back without affecting readiness or military capability. The Congress might choose, for example, to slow some of DoD's environmental cleanup efforts or reduce the amount of money spent on programs to help defense firms convert to commercial markets. The

40. CBO, "Planning for Defense."

Congress might also reconsider what part the nation should play in humanitarian, peacekeeping, and other contingency operations. If the United States continues its role in current operations or expands those efforts, should funding for that involvement replace spending for training and support in more traditional warfighting operations?

Under a broad interpretation of the term "nontraditional spending," that category accounts for about \$11 billion to \$13 billion in annual defense expenditures. If DoD's responsibilities were defined more narrowly to exclude some of these activities, there might be less pressure on defense costs. But that change might not lower overall federal spending if the responsibility for those programs was simply transferred to another federal agency. And unless the Congress was willing to eliminate most or all of the programs, it seems doubtful that savings from this area would, by themselves, cover the likely size of DoD's shortfall.

Cut Programs Designed to Protect the Defense Industrial Base. In recent years, the Administration and the Congress have included funding within the defense budget for some weapon systems not only because they meet a military need but also because the industry that produces that equipment would lose important skills and capabilities if production ceased. Advocates of, for example, the purchase of a third Seawolf submarine argue that it may be less expensive to purchase additional weapons today than to close down their production lines and restart them some time in the future.⁴¹ That argument does not apply, however, to all systems. In the case of upgrades to the M1 tank, for instance, a CBO analysis found that an upgrade program would be more costly than mothballing the production line.⁴² In addition, weapons programs add military capability (of whatever importance) to the U.S. arsenal. Critics, however, contend that the benefits of policies that aim to sustain military design and production capabilities are too nebulous—it is unclear when or even if the United States will need to restart production lines in the future. In the meantime, spending for unnecessary programs is undertaken at the expense of today's military readiness.

The magnitude of potential savings from cuts to defense industrial base programs depends on what one includes within that category. It seems clear, for example, that initiatives for the M1 upgrade, the Seawolf submarine, and the ammunition industrial base are designed with future production capability

41. John Birkler and others, *The U.S. Submarine Production Base*, MR-456-OSD (Santa Monica, Calif.: RAND, 1994).

42. Congressional Budget Office, "Alternatives for the U.S. Tank Industrial Base," CBO Paper (February 1993).

in mind.⁴³ But other weapons purchases might be included under this category as well, depending on one's opinion about the necessity of their associated military capability.

Do Business More Efficiently

The Congress and the Administration are in the midst of policy changes that aim to reduce DoD's costs of doing business. If that aim is achieved, some but probably not all of the funding pressures that DoD is likely to face during the FYDP period could be alleviated.

Reform the Acquisition Process. Under the Administration's National Performance Review (NPR) and recent legislative changes to the procurement process, the costs of buying weapons and equipment could fall. Indeed, the Administration is counting on this to be the case: it assumed that federal agencies would save about \$12 billion during the 1995-1999 period because of NPR initiatives. DoD was told to reduce its budget authority in 1995 by \$315 million as a result of that assumption, but if future cuts are proportional to its share of discretionary spending and procurement costs do not fall, DoD may need to make programmatic changes that would reduce its budget by \$5.1 billion over the 1996-1999 period.

How much in savings should DoD count on from acquisition reform? Over the years, numerous Administrations have attempted to overhaul DoD's procurement process and improve its efficiency, yet most analysts consider those efforts to have met with little success. The 1984 Grace Commission and the 1986 Packard Commission, for example, are just two of many panels that have suggested initiatives to improve acquisition efficiency. But few of the calls for simplifying procurement practices and using products widely available in the commercial sector have ever been implemented by the Defense Department.

The Administration has taken concrete steps to address acquisition reform. For example, Secretary Perry has initiated a process to review and reduce the number of military specifications, and DoD now has a pilot program under which six major acquisition projects may use commercial practices. The Congress adopted many of the statutory changes recommended by DoD's Acquisition Law Advisory Panel in the Federal Acquisition Streamlining Act, which was passed in September 1994. The Defense Department has begun as well to reduce its workforce under NPR guidelines,

43. Department of Defense, *Industrial Capabilities for Defense* (September 1994).

although cuts in the acquisition corps of the services have not yet been as large as those for the procurement projects they oversee.⁴⁴ It remains to be seen, however, what magnitude of savings those steps may produce.

Consolidate Infrastructure. Although military forces have declined by 30 percent to 45 percent between 1990 and 1995, the replacement value of DoD's bases and facilities will have fallen by only about 15 percent (20 percent, if one includes all facilities worldwide) once currently planned closures are completed. That relatively small drop suggests that the costs of operating and supporting each unit of U.S. forces may have increased. In the face of such a restrictive spending climate, it is critical that DoD find ways to reduce its infrastructure burden.

A recent CBO paper points to several areas in which support functions might be restructured and consolidated to reduce costs, including military medical care, family housing, the acquisition workforce, depot maintenance, intelligence activities, and pilot training.⁴⁵ In the case of weapons maintenance, for example, CBO's analysis found that, given the services' projections of future workload and depot capacity, DoD could close up to seven public depots in the 1995 BRAC round and ultimately reduce defense costs by about \$400 million per year. In many cases, the services could downsize their support functions independent of one another. But given each service's desire to keep control over its own support operations and the political and bureaucratic obstacles to downsizing, the Administration and the Congress should also consider assigning primary responsibility for certain support activities to a lead service or restructuring separate activities into joint operations.

Options That Reduce Capabilities

Those policy alternatives that are most certain to pare defense costs involve reducing military capabilities.

Reassign Roles and Missions Among the Services. Assignments of combat roles and missions among the services have remained basically unchanged since U.S. military leaders came to an agreement on the matter nearly 50 years ago in Key West, Florida. The downturn in defense spending, however, has reinvigorated debate about the issue. Indeed, in its defense authorization

44. Congressional Budget Office, "Easing the Burden: Restructuring and Consolidating Defense Support Activities," CBO Paper (July 1994).

45. Ibid.

bill for 1994, the Congress set up an independent commission to review the current assignments of roles and missions among the services with an eye toward reducing duplication of efforts and defense costs.

In March 1994 testimony before the Senate Budget Committee, CBO analyzed several possible changes to combat responsibilities among the services.⁴⁶ Under one such change, the Marine Corps would be assigned primary responsibility for providing contingency forces. Other options included making the Army responsible for its own close air support rather than relying on the Air Force, reducing the number of Navy aircraft that support Marine operations, relying on Air Force bombers rather than planes on Navy aircraft carriers to conduct air strikes on distant targets, and increasing the Army's role in theater missile defense.

The topic of roles and missions is contentious; each service vigorously defends its current missions and the resources it is assigned to carry them out. And although the options presented here have the potential to save considerable amounts of money, some changes would arguably reduce military capability—an outcome that is not widely popular in the aftermath of significant cuts that have already been made to achieve BUR force levels.

Spend Less to Maintain Readiness. For 1995, the Administration's plan appears to emphasize O&M spending, a budget category that funds activities related to readiness such as training and weapons maintenance. It is difficult to determine how well the Administration's plan funds readiness-related activities over the remainder of the decade. The drawdown in personnel and in forces, together with the uncertainty surrounding the magnitude of future base closures, makes it unclear whether the O&M dollars programmed in the FYDP are sufficient.

Some people argue that contingency operations have already affected readiness: spending for smaller-scale missions has drawn off resources that would otherwise have been used for traditional training exercises, repair of equipment, and other activities that prepare U.S. forces for combat. Whatever the current status of U.S. readiness may be, as upward pressure on defense costs increases, it seems clear that readiness will ultimately be affected. If the Administration and the Congress hold on to excess infrastructure, for example, the burden of keeping those facilities open would leave fewer resources available for activities that affect readiness directly.

46. Statement of Robert D. Reischauer, Director, Congressional Budget Office, before the Senate Committee on the Budget, March 9, 1994.

Cut Force Structure. Given the pressures on the defense budget, the Administration and the Congress may be forced to consider whether the objectives of the BUR's two-war scenario are appropriate ones for the United States. If the most likely foes have forces less capable than those included as part of the Administration's assumptions during its Bottom-Up Review, or if one believes that U.S. forces are likely to be used sequentially rather than simultaneously in major regional conflicts, the United States may be willing to assume greater risk in return for lower levels of defense spending. Alternatively, some Members of Congress believe that the United States must maintain the ability to fight and win two conflicts. Otherwise, an ambitious adversary could take advantage of U.S. involvement in one war to achieve its aims.

Cancel Weapons Programs or Delay Some Modernization. One approach that the Administration and some Members of Congress seem willing to consider is to cancel some new weapon systems currently under development. Given the large numbers of platforms that were purchased during the 1980s, that approach may be acceptable for some categories of weapons. The Congress has recently debated, for example, whether the Navy needs its new attack submarine, a system designed to sustain a 45- to 55-ship attack sub force at lower cost than alternative submarines such as the Seawolf. The Administration recently announced that it plans to cancel or dramatically restructure two major programs considered to be among the services' highest priorities, the Tri-Service Standoff Attack Missile and the Comanche helicopter. (The Army will purchase two prototype Comanches but will not procure large numbers of the helicopter in the 1996-2001 period.)

A related alternative is for DoD to delay some of its modernization plans. For example, the Administration will delay development of the Marine Corps's advanced amphibious assault vehicle by two years and the Air Force's F-22 fighter aircraft by a few months. Procurement of new equipment cannot be postponed indefinitely, however, and delays may make DoD's long-term budget situation more problematic.

Another tactic is to reduce the annual quantities produced for weapon systems for which procurement is already under way. The Administration has decided, for example, to slow the rate at which it procures DDG-51 destroyers and postpone production of the new attack submarine. That approach reduces annual expenditures for those weapons, but for weapons whose production is marked by economies of scale (such as aircraft), each unit costs more. During the current period, annual rates of production for many weapon systems are already low, so the cost of that approach could be considerable.